

ELEMENTARY
CORE Academy

UTAH STATE OFFICE OF EDUCATION & UTAH STATE UNIVERSITY



**2008
Participant
Handbook**

UTAH STATE
OFFICE OF



EDUCATION

UtahState
UNIVERSITY

ELEMENTARY CORE ACADEMY

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Leadership...Service...Accountability

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Dear CORE Academy Teachers:

Thank you for your investment in children and in building your own expertise as you participate in the Elementary CORE Academy. I hope your involvement helps you to sustain a laser-like focus on student achievement.

Teachers in Utah are superb. By participating in the Academy, you join a host of teachers throughout the state who understand that teaching targeted on the core curricula, across a spectrum of subjects, will produce results of excellence. The research is quite clear—the closer the match of explicit instruction to core standards, the better the outcome on core assessments.

I personally appreciate your excellence and your desire to create wonderful classrooms of learning for students. Thank you for your dedication. I feel honored to associate with you and pledge my support to lead education in ways that benefit all of our children.

Sincerely,



Patti Harrington, Ed.D.
State Superintendent of Public Instruction

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Major funding for the Academy comes from the following sources:

Federal/State Funds:

- Utah State Office of Education
 - Staff Development Funds
 - Special Education Services Unit
- ESEA Title II
- Utah Math Science Partnership

District Funds:

Various sources including Quality Teacher Block, Federal ESEA Title II, and District Professional Development Funds

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- Trust land, ESEA Title II, and other school funds
- Utah State Office of Education Special Education Services

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Additionally, numerous school districts, individual schools, and principals in Utah have sponsored teachers to attend the Academy. Other educational groups have assisted in the development and delivery of resources in the Academy.

Most important is the thousands of teachers who take time from their summer to attend these professional development workshops. It is these teachers who make this program possible.

Goals of the Elementary CORE Academy

Overall

The purpose of the Elementary CORE Academy is to create high quality teacher instruction and improve student achievement through the delivery of professional development opportunities and experiences for teachers across Utah.

The Academy will provide elementary teachers in Utah with:

1. Models of exemplary and innovative instructional strategies, tools, and resources to meet the Core Curriculum standards, objectives, and indicators.
2. Practical models and diverse methods of meeting the learning needs of all children, with instruction implementation aligned to the Core Curriculum.
3. Meaningful opportunities for collaboration, self-reflection, and peer discussion specific to innovative and effective instructional techniques, materials, teaching strategies, and professional practices in order to improve classroom instruction.

Learning a limited set of facts will no longer prepare a student for real experiences encountered in today's world. It is imperative that educators have continued opportunities to obtain instructional skills and strategies that provide methods of meeting the needs of all students. Participants of the Academy experience will be better equipped to meet the challenges faced in today's classrooms.

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Kindergarten Core Curriculum

K-2 Core Curriculum

Introduction

Most students enter school confident in their own abilities; they are curious and eager to learn more. They make sense of the world by reasoning and problem solving. Young students are active, resourceful individuals who construct, modify, and integrate ideas by interacting with the physical world as well as with peers and adults. They learn by doing, collaborating, and sharing their ideas. Students' abilities to communicate through language, pictures, sound, movement, and other symbolic means develop rapidly during these years.

Literacy requires an understanding of listening, speaking, reading, writing, and viewing in many forms including print and electronic images. Today, more than ever, students must have the ability to think critically while applying new information to existing knowledge. Therefore, school literacy programs need to involve students in learning to read and write in situations that foster critical thinking and the use of literacy for independent learning in all content areas.

Young students are building beliefs about what mathematics is, about what it means to know and do mathematics, and about themselves as mathematical learners. Mathematics instruction needs to include more than short-term learning of rote procedures. Students must use technology and other mathematical tools, such as manipulative materials, to develop conceptual understanding and solve problems as they do mathematics. Students, as mathematicians, learn best with hands-on, active experiences throughout the instruction of the mathematics curriculum.

Language Arts and Mathematics are the tools for doing work in other areas. These content areas need to be integrated into other curriculum areas to provide students with optimal learning. The curriculum becomes more relevant when content areas are connected rather than taught in strict isolation. For this reason, the content areas of the Fine Arts, Health Education, Physical Education, Science, and Social Studies have been combined to enable teachers to teach more efficiently and students to learn in a real-life context that enhances lifelong learning.

The Kindergarten through Second Grade Core describes what students should know and be able to do at the end of each of the kindergarten, first, and second grade levels. It has been developed, critiqued, and revised by a community of Utah teachers, university

- Young children learn by doing, collaborating, and sharing their ideas.



Organization of the
K-2 Core:

- Intended Learning Outcomes
- Standard
- Objective
- Indicator

educators, the State Office of Education specialist, and an advisory committee representing a wide variety of people from the community. The Core reflects the current philosophy of education that is expressed in national documents developed by the International Reading Association, National Council of the Teachers of Mathematics, National Standards for Arts Education, Information Power, National Association for Sport and Physical Education, American Association for the Advancement of Science, National Council for the Social Studies, International Society for Technology and Education, and Early Childhood Standards.

Organization of the K-2 Core

The Core is designed to help teachers organize and deliver instruction.

- Each grade level begins with a brief course description.
- The Kindergarten, First, and Second Grade INTENDED LEARNING OUTCOMES describe the goals for students to gain knowledge and understand their world. They are found at the beginning of each grade level, are an integral part of the Core, and should be included as part of instruction.
- The first Core area consists of the Language Arts curriculum.
- The second Core area consists of the Mathematics curriculum.
- The third Core area consists of the subject areas of the Fine Arts, Health Education, Physical Education, Science, and Social Studies.
- A STANDARD is a broad statement of what students are expected to understand. Several Objectives are listed under each Standard.
- An OBJECTIVE is a more focused description of what students need to know and be able to do at the completion of instruction. If students have mastered the Objectives associated with a given Standard, they have mastered that Standard at that grade level. Several Indicators are described for each Objective.
- An INDICATOR is a measurable or observable student action that enables one to assess whether a student has mastered a particular Objective. Indicators are not meant to be classroom activities, but they can help guide classroom instruction.

Guidelines Used in Developing the K-2 Core

The Core is:

Consistent With the Nature of Learning

The main intent in the early grades is for students to value learning and develop the skills to gain knowledge and understand their world. The Core is designed to produce an integrated set of Kindergarten, First Grade, and Second Grade Intended Learning Outcomes for students, with specific goals in all content areas.

Coherent

The Core has been designed so that, wherever possible, the ideas taught within a particular grade level have a logical and natural connection with each other and with those of earlier grades. Efforts have also been made to select topics and skills that integrate well with one another appropriate to grade level. In addition, there is an upward articulation of concepts, skills, and content. This spiraling is intended to prepare students to understand and use more complex concepts and skills as they advance through the learning process.

Developmentally Appropriate

The Core takes into account the psychological and social readiness of students. It builds from concrete experiences to more abstract understandings. The Core focuses on providing experiences with concepts that students can explore and understand in depth to build the foundation for future learning experiences.

Reflective of Successful Teaching Practices

Learning through play, movement, and adventure is critical to the early development of the mind and body. The Core emphasizes student exploration. The Kindergarten, First Grade, and Second Grade Intended Learning Outcomes are central in each standard. The Core is designed to encourage instruction with students working in cooperative groups. Instruction should recognize the importance of each Core area in the classroom, school, and community.

Comprehensive

The Kindergarten, First, and Second Grade Core does not cover all topics that have traditionally been in the Kindergarten, First Grade, and Second Grade curriculum; however, it provides a basic foundation of knowledge and skills in all content areas. By emphasizing depth rather than breadth, the Core seeks to empower students rather than

- By emphasizing depth rather than breadth, the Core seeks to empower students.

- Student achievement of the standards and objectives in this Core is best assessed using a variety of assessment instruments.

intimidate them with a collection of isolated and eminently forgettable facts. Teachers are free to add related concepts and skills, but they are expected to teach all the standards and objectives specified in the Core for their grade level.

Feasible

Teachers and others who are familiar with Utah students, classrooms, teachers, and schools have designed the Core. It can be taught with easily obtained resources and materials. A Teacher Handbook is also available for teachers, and has sample lessons on each topic for each grade level. The Teacher Handbook is a document that will grow as teachers add exemplary lessons aligned with the new Core.

Useful and Relevant

This curriculum relates directly to student needs and interests. Relevance of content areas to other endeavors enables students to transfer skills gained from one area of instruction into their other school subjects and into their lives outside the classroom.

Reliant Upon Effective Assessment Practices

Student achievement of the standards and objectives in this Core is best assessed using a variety of assessment instruments. Performance tests are particularly appropriate to evaluate student mastery of thinking processes and problem-solving skills. A variety of classroom assessment approaches should be used by teachers in conjunction with the Criterion Referenced Tests (CRT) that are administered to first and second grade students in Language Arts and Mathematics, and with the pre- and post-tests administered in kindergarten. Observation of students engaged in instructional activities is highly recommended as a way to assess students' skills as well as attitudes toward learning. The nature of the questions posed by students provides important evidence of their understanding.

Engaging

In the early grades, children are forming attitudes and habits for learning. It is important that instruction maximizes students' potential and gives them understanding of the intertwined nature of learning. Effective elementary instruction engages students actively in enjoyable learning experiences. Instruction should be as thrilling an experience for a child as seeing a rainbow, growing a flower, or describing a toad. In a world of rapidly expanding knowledge and technology, all students must gain the skills they will need to understand and function responsibly and successfully in the world. The Core provides skills in a context that enables students to experience the joy of learning.

The Kindergarten Core Curriculum

In kindergarten, core concepts should be integrated across all curriculum areas. Reading, writing, and mathematical skills should be emphasized as integral to the instruction in all other areas. Personal relevance of content is always an important part of helping students to value learning and should be emphasized.

Kindergarten students engage in many activities that help them develop oral language and literacy. Kindergarten students take part in language activities that extend their vocabulary, conceptual knowledge, and phonological awareness. Students learn to follow directions and develop the language of schooling.

Within a well-balanced mathematics curriculum, students understand small numbers, quantities, and simple shapes in their everyday environment. They count, compare, describe and sort objects, and develop a sense of patterns. Students also develop an understanding of measurable attributes of objects.

In kindergarten, students learn about themselves and their relationship to the classroom, school, family, and community. Students are expected to develop skills in posing simple questions, measuring, sorting, classifying, and communicating information about the natural world. Students learn about their bodies and the behaviors necessary to protect them and keep them healthy. They learn basic body control while beginning to develop motor skills and moving in a variety of settings. Students become aware of strength, endurance, and flexibility in different parts of their bodies. They express their thoughts and ideas creatively, while challenging their imagination, fostering reflective thinking, and developing disciplined effort and problem-solving skills.

- Reading, writing, and mathematical skills should be emphasized as integral to the instruction in all other areas.



K-2 Intended Learning Outcomes

- Intended learning outcomes provide a direction for general classroom instruction, management, culture, environment, and inclusion.

The main intent at the early grades is for students to value learning and develop the skills to gain knowledge and understand their world.

The Intended Learning Outcomes described below reflect the belief that kindergarten, first grade, and second grade education should address the intellectual, social, emotional, physical, and ethical development of children. While the Kindergarten, First Grade, and Second Grade Core Curriculum focuses primarily on content and the intellectual development of children, it is important to create a classroom culture that fosters development of many aspects of a person. By nurturing development in these interrelated human domains, young people will be healthy and discover varied and exciting talents and dreams. They will be socially and civically competent and able to express themselves effectively.

The outcomes identified below are to provide a direction for general classroom instruction, management, culture, environment, and inclusion. These outcomes should be interwoven throughout the Kindergarten, First Grade, and Second Grade Core Curriculum, which offers more specific and measurable standards for instruction.

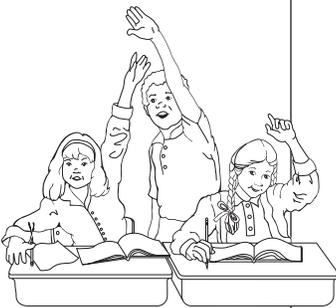
Beginning in kindergarten and by the end of second grade students will be able to:

1. **Demonstrate a positive learning attitude.**

- a. Display a sense of curiosity.
- b. Practice personal responsibility for learning.
- c. Demonstrate persistence in completing tasks.
- d. Apply prior knowledge and processes to construct new knowledge.
- e. Voluntarily use a variety of resources to investigate topics of interest.

2. **Develop social skills and ethical responsibility.**

- a. Respect similarities and differences in others.
- b. Treat others with kindness and fairness.
- c. Follow classroom and school rules.
- d. Include others in learning and play activities.
- e. Participate with others when making decisions and solving problems.
- f. Function positively as a member of a family, class, school, and community.



3. Demonstrate responsible emotional and cognitive behaviors.

- a. Recognize own values, talents, and skills.
- b. Express self in positive ways.
- c. Demonstrate aesthetic awareness.
- d. Demonstrate appropriate behavior.
- e. Express feelings appropriately.
- f. Meet and respect needs of self and others.

4. Develop physical skills and personal hygiene.

- a. Respect physical similarities and differences in self and others.
- b. Learn proper care of the body for health and fitness.
- c. Develop knowledge that enhances participation in physical activities.
- d. Display persistence in learning motor skills and developing fitness.
- e. Use physical activity for self-expression.

5. Understand and use basic concepts and skills.

- a. Develop phonological and phonemic awareness.
- b. Decode, read, and comprehend written text and symbols.
- c. Develop vocabulary.
- d. Develop reasoning and sequencing skills.
- e. Demonstrate problem-solving skills.
- f. Observe, sort, and classify objects.
- g. Make and interpret representations, graphs, and models.
- h. Recognize how content ideas interconnect.
- i. Make connections from content areas to application in real life.

6. Communicate clearly in oral, artistic, written, and nonverbal form.

- a. Share ideas using communication skills.
- b. Predict an event or outcome based on evidence.
- c. Use appropriate language to describe events, objects, people, ideas, and emotions.
- d. Listen attentively and respond to communication.

Kindergarten Language Arts Core Curriculum

Standard I:
Oral Language—
Students develop
language for
the purpose
of effectively
communicating
through listening,
speaking, viewing,
and presenting.

Standard I: Oral Language—Students develop language for the purpose of effectively communicating through listening, speaking, viewing, and presenting.

Objective 1: Develop language through listening and speaking.

- a. Listen attentively.
- b. Listen and demonstrate understanding by responding appropriately (e.g., follow two-step directions).
- c. Speak clearly and audibly with expression in communicating ideas.
- d. Speak in complete sentences.

Objective 2: Develop language through viewing media and presenting.

- a. View a variety of media presentations attentively.
- b. Use a variety of formats (e.g., show and tell, drama, sharing of books) in presenting with various forms of media.



Standard II: Concepts of Print—Students develop an understanding of how printed language works.

Objective 1: Demonstrate an understanding that print carries “the” message.

- a. Recognize that print carries different messages.
- b. Identify messages in common environmental print (e.g., signs, boxes, wrappers).

Objective 2: Demonstrate knowledge of elements of print within a text.

- a. Identify front/back, top/bottom, left/right of text/book.
- b. Discriminate between upper- and lower-case letters, numbers, and words in text.
- c. Show the sequence of print by pointing left to right with return sweep.
- d. Identify where text begins and ends on a page.
- e. Identify punctuation in text (i.e., periods, question marks, exclamation points).

Standard II:
Concepts of Print—
Students develop
an understanding of
how printed language
works.

Standard III:
Phonological
and Phonemic
Awareness—
Students develop
phonological
and phonemic
awareness.

Standard III: Phonological and Phonemic Awareness—Students develop phonological and phonemic awareness.

Objective 1: Demonstrate phonological awareness.

- a. Count the number of words in a sentence.
- b. Identify and create a series of rhyming words orally (e.g., cat, bat, sat, _____).
- c. Recognize words beginning with the same initial sound in an alliterative phrase or sentence (e.g., Six snakes sold snacks and sodas.).

Objective 2: Recognize like and unlike word parts (odddity tasks).

- a. Identify the word that does not rhyme in a series of words (e.g., bat, cat, sat, pig).
- b. Identify the words with same beginning consonant sound in a series of words (e.g., man, sat, sick) and ending consonant sound (e.g., man, sat, then).

Objective 3: Orally blend word parts (blending).

- a. Blend syllables to make words (e.g., /ta/.../ble/, table).
- b. Blend onset and rimes to make words (e.g., /p/.../an/, pan).
- c. Blend individual phonemes to make words (e.g., /s/.../a/.../t/ t/, sat).

Objective 4: Orally segment words into word parts (segmenting).

- a. Segment words into syllables (e.g., table, /ta/.../ble/).
- b. Segment words into onset and rime (e.g., pan, /p/...an).
- c. Segment words into individual phonemes (e.g., sat, /s/.../t/ a/.../t/).

Objective 5: Orally manipulate phonemes in words and syllables (manipulation).

- a. Substitute initial sound (e.g., replace the first sound in mat to /s/, say sat).
- b. Substitute initial sound to create new words (e.g., replace the first sound in mat with letters of the alphabet).

Standard IV: Phonics and Spelling—Students use phonics and other strategies to decode and spell unfamiliar words while reading and writing.

Objective 1: Demonstrate an understanding of the relationship between letters and sounds.

- a. Name all upper-and lower-case letters of the alphabet in random order.
- b. Match consonant and short vowel sounds to the correct letter.
- c. Blend simple cvc sounds into one-syllable words.

Objective 2: Use knowledge of structural analysis to decode words.

- a. Identify and read grade level contractions and compound words.
- b. Identify sound patterns and apply knowledge to decode words (e.g., blends, digraphs, vowel patterns, r-controlled vowels).
- c. Demonstrate an understanding of representing the same sound with different patterns by decoding these patterns accurately in isolation and in text (e.g., ee, ea, ei, e).
- d. Use knowledge of root words and prefixes (e.g., re, un, mis) and suffixes (e.g., s, es, ed, ing, est, ly) to decode words.
- e. Use letter and syllable patterns to pronounce multisyllabic words.

Objective 3: Spell words correctly.

- a. Hear and write letters to represent single sounds in words.
- b. Spell a small number of grade level words (e.g., you, the, to, is).
- c. Spell first name correctly.

Objective 4: Use spelling strategies to achieve accuracy (e.g., prediction, visualization, association).

- a. Use knowledge about spelling to predict the spelling of new words.
- b. Associate the spelling of new words with that of known words.

**Standard IV:
Phonics and
Spelling—Students
use phonics and
other strategies to
decode and spell
unfamiliar words
while reading and
writing.**

Standard V:
Fluency—Students
develop reading
fluency to read
aloud grade level
text effortlessly
without hesitation.

Standard V: Fluency—Students develop reading fluency to read aloud grade level text effortlessly without hesitation.

Objective 1: Read aloud grade level text with appropriate speed and accuracy.

- a. Read alphabet letters in random order with automaticity.
- b. Read numerals from zero to ten in random order with automaticity.

Objective 2: Read aloud grade level text effortlessly with clarity.

- a. Use appropriate intonation and expression during unison oral reading with the teacher.
- b. Read with automaticity approximately 25 high-frequency/sight words.

Standard VI: Vocabulary—Students learn and use grade level vocabulary to increase understanding and read fluently.

Objective 1: Learn new words through listening and reading widely.

- a. Use new vocabulary learned by listening, reading, and discussing a variety of genres.
- b. Learn the meaning of a variety of grade level words (e.g., words from literature, social studies, science, math).
- c. Use resources to learn new words by relating them to known words (e.g., books, charts, word walls).

Objective 2: Use multiple resources to learn new words by relating them to known words and/or concepts. See second, third, fourth, fifth, and sixth grades.

Objective 3: Use structural analysis and context clues to determine meanings of words.

- a. Identify meanings of words by looking at the root word and using known endings (e.g., car, cars; jump, jumped, jumping).
- b. Monitor reading using context to explain the meanings of unknown key words from text read aloud.

**Standard VI:
Vocabulary—
Students learn
and use grade
level vocabulary
to increase
understanding and
read fluently.**

Standard VII:
Comprehension—
Students
understand,
interpret, and
analyze narrative
and informational
grade level text.

Standard VII: Comprehension—Students understand, interpret, and analyze narrative and informational grade level text.

Objective 1: Identify purposes of text.

- a. Discuss purpose for reading.
- b. Discuss author's purpose.

Objective 2: Apply strategies to comprehend text.

- a. Relate prior knowledge to make connections to text (e.g., text to text, text to self, text to world).
- b. Ask questions about text.
- c. Make predictions using picture clues, title, and prior knowledge.
- d. Make inferences and draw conclusions from text.
- e. Retell identifying key ideas.
- f. Compile information from text.

Objective 3: Recognize and use features of narrative and informational text.

- a. Identify beginning, middle, and ending of text.
- b. View a variety of simple genres: nursery rhymes, fairy tales, poems, realistic fiction, fantasy.
- c. Identify information from pictures.
- d. Recognize information as real/make believe.
- e. View a variety of informational texts (e.g., pictures, books).

Standard VIII: Writing—Students write daily to communicate effectively for a variety of purposes and audiences.

Objective 1: Prepare to write by gathering and organizing information and ideas (pre-writing).

- a. Generate ideas for writing by listening, talking, drawing, looking at literature and informational text, being read to, and reflecting on personal experiences.
- b. Select topics from generated ideas.

Objective 2: Compose a written draft.

- a. Draft ideas on paper, utilizing pictures with labels/words.
- b. Select appropriate words to convey meaning.

Objective 3: Revise by elaborating and clarifying a written draft. See first, second, third, fourth, fifth, and sixth grades.

Objective 4: Edit written draft for conventions.

- a. Edit writing of first name for appropriate capital and lower-case letters.
- b. Edit writing for the spelling of a key word.

Objective 5: Use fluent and legible handwriting to communicate.

- a. Print all upper- and lower-case letters of the alphabet and numerals 0-9 using proper form, proportions, and spacing.
- b. Write with increasing fluency in forming manuscript letters and numerals.
- c. Write name legibly using correct manuscript form.

Objective 6: Write in different forms and genres.

- a. Produce personal writing (e.g., All About Me books, notes).
- b. Produce traditional and imaginative stories, narrative and formula poetry as a shared writing activity.
- c. Produce functional text (e.g., ABC books, labels, signs).
- d. Share illustrations and writing with others.
- e. Take part in producing group products.

Standard VIII:
Writing—Students write daily to communicate effectively for a variety of purposes and audiences.

Kindergarten Mathematics Core Curriculum

Standard I:
Students will understand simple number concepts and relationships.

By the end of kindergarten, students understand small numbers, quantities, and simple shapes in their everyday environment. They count, compare, describe and sort objects, and develop a sense of patterns. Students also develop an understanding of measurable attributes of objects.

Standard I: Students will understand simple number concepts and relationships.

Objective 1: Identify and use whole numbers up to 30.

- a. Represent whole numbers using concrete, pictorial, and symbolic representations.
- b. Order a set of up to ten objects and use ordinal numbers from first to tenth to identify the position of the object in the chosen order.
- c. Use one-to-one correspondence when counting a set of objects and develop a strategy for keeping track of counted and uncounted objects.

Objective 2: Identify and use simple relationships among whole numbers up to 30.

- a. Estimate quantities in a set of objects using multiples of 10 as benchmark numbers.
- b. Compose and decompose quantities to establish a relationship between the parts and the whole.
- c. Recognize 5 or 10 as a part of the part-whole relationship of numbers.
- d. Compare sets of objects and determine whether they have the same, fewer, or more objects.

Objective 3: Model, describe, and illustrate meanings of addition and subtraction for whole numbers less than ten.

- a. Demonstrate the joining and separating of sets of objects to solve problems.
- b. Describe the joining or separating of sets with informal language when using models.
- c. Record pictorially the results from joining or separating of sets.

Mathematical language and symbols students should use:

add, subtract, first, second, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth, same, fewer, more

Exploratory Concepts and Skills

- Count by ones, beginning from any number in the counting sequence.
- Represent quantities using concrete objects and investigate partitioning of sets.
- Create problems that can be solved using addition and subtraction.

Standard II: Students will sort and classify objects as well as recognize and create simple patterns.

Objective 1: Identify, sort, and classify objects according to common attributes.

- a. Sort objects into groups by attribute and identify which attribute was used.
- b. Describe multiple ways to sort and classify a group of objects.

Objective 2: Identify, duplicate, describe, and extend simple repeating and growing patterns.

- a. Identify and describe simple repeating patterns with numbers and shapes.
- b. Duplicate and extend simple repeating patterns with numbers and shapes.
- c. Describe simple growing patterns with shapes.
- d. Identify simple patterns in the environment.

Mathematical language and symbols students should use:
sort, repeating patterns, growing patterns

Exploratory Concepts and Skills

- Explore skip counting by fives, tens, and twos.

Standard II:
Students will sort and classify objects as well as recognize and create simple patterns.



Standard III:
Students will understand basic geometry and measurement concepts as well as collect and organize data.

Standard III: Students will understand basic geometry and measurement concepts as well as collect and organize data.

Objective 1: Identify and create simple geometric shapes and describe simple spatial relationships.

- a. Identify, name, describe, and draw circles, triangles, rectangles, and squares in various sizes and orientations.
- b. Combine shapes to create two-dimensional objects (e.g., use a triangle and square to create a picture of a house).
- c. Use words to describe position and distance.
- d. Investigate two- and three-dimensional shapes including hexagons, trapezoids, spheres, cubes, and cones.

Objective 2: Identify and use measurable attributes of objects and units of measurement.

- a. Identify clocks and calendars as tools that measure time.
- b. Identify a day, week, and month on a calendar and name the days of the week in order.
- c. Identify pennies, nickels, dimes, and quarters as units of money.
- d. Compare two objects by measurable attributes (i.e., length, weight) and order several objects by measurable attributes (i.e., length, weight).

Objective 3: Collect and organize simple data.

- a. Pose questions and gather data about self and surroundings.
- b. Organize data obtained from sorting and classifying objects.

Mathematical language and symbols students should use:

circle, triangle, rectangle, square, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, penny, nickel, dime, quarter, shorter, longer, above, below, near, far, between

Exploratory Concepts and Skills

- Measure objects using non-standard units.
- Identify the value of a penny, nickel, dime, and quarter.
- Organize data in lists, tables, and simple graphs.

Kindergarten Fine Arts, Health, Physical Education, Science, and Social Studies Core Curriculum

Standard I: Students will develop a sense of self.

Objective 1: Describe and practice responsible behaviors for health and safety.

- a. Describe proper care of the body (e.g., proper brushing of teeth, eating a variety of foods, proper hand washing, sneezing into sleeve).
- b. Recognize that food is fuel for the body.
- c. Recognize signs of physical activity (e.g., heart rate, breathing, sweat).
- d. Identify helpful and harmful substances to the body.
- e. Recall basic safety (e.g., follow rules, maintain personal space/boundaries, know phone number, address, emergency number).

Objective 2: Develop skills in gross and fine motor movement.

- a. Participate in regular physical activity that requires exertion (e.g., walk, jog, jump rope).
- b. Explore a variety of fundamental and manipulative gross motor skills (e.g., hop, skip, twirl, dance, throw, catch, kick, strike).
- c. Perform a variety of fine motor skills (e.g., draw, cut, paste, mold, write).
- d. Maintain personal space and boundaries while moving.
- e. Create and perform simple dance movements that express who one is, knowledge of the body, feelings, senses, and ideas in time and space.

Objective 3: Develop and use skills to communicate ideas, information, and feelings.

- a. Identify and express ideas, information, and feelings in a variety of ways (e.g., draw, paint, tell stories, play, make believe, dance, sing).
- b. Recognize similar colors as being members of the family of reds, blues, and yellows and shapes as being similar to squares, circles, and triangles.

Standard I:
Students will
develop a sense
of self.

- c. Describe sounds in terms of dynamics (loud/soft), pitch (high/low), duration (long/short; fast/slow), and timbre (tone of an animal, human, musical instrument, or machine).
- d. Develop competency in beat accuracy and respond to an understanding of beat as a life force through moving, singing, chanting, or playing instruments.
- e. Express emotions by selecting and playing a variety of simple rhythm instruments.

Standard II: Students will develop a sense of self in relation to families and community.

Objective 1: Describe factors that influence relationships with family and friends.

- a. Identify ways individuals are alike and different.
- b. Identify contributions of family members.
- c. Describe how children change over time.
- d. Identify behaviors to initiate play and develop friendships.
- e. Demonstrate positive interactions with peers and adults.

Objective 2: Identify important aspects of community and culture that strengthen relationships.

- a. Recognize and follow family and classroom rules.
- b. Describe the school community (e.g., students, teachers, secretary, custodian, principal).
- c. Describe resources in the community (e.g., police officer, firefighter, library, museum).
- d. Describe cultural traditions in family and community.
- e. Recognize national symbols and recite the Pledge of Allegiance.

Objective 3: Express relationships in a variety of ways.

- a. Recognize traditions, music, dances, artwork, poems, rhymes, and stories that distinguish cultures.
- b. Develop skills in storytelling through moving the body and making sounds while pretending to be characters in a familiar story.
- c. Create and perform/exhibit dances, visual art, music, and dramatic stories from various cultures.

Standard II:
Students will develop a sense of self in relation to families and community.

Standard III:
Students will
develop an
understanding
of their
environment.

Standard III: Students will develop an understanding of their environment.

Objective 1: Investigate changes in the seasons.

- a. Identify the seasons and represent each with pictures and songs.
- b. Observe and describe typical weather for each of the seasons.
- c. Describe the information each of the five senses provides with the changing of seasons.
- d. Observe and describe changes in behavior of animals as the seasons change.
- e. Describe how people change their behavior as the seasons change.

Objective 2: Observe and describe animals in the local environment.

- a. Observe, describe, draw, and compare familiar animals.
- b. Describe how young animals are different from adult animals.
- c. Describe how animals care for their young.
- d. Observe and imitate the sounds and movements of animals with songs, dances, and storytelling.
- e. Distinguish between real and make-believe animal behaviors.

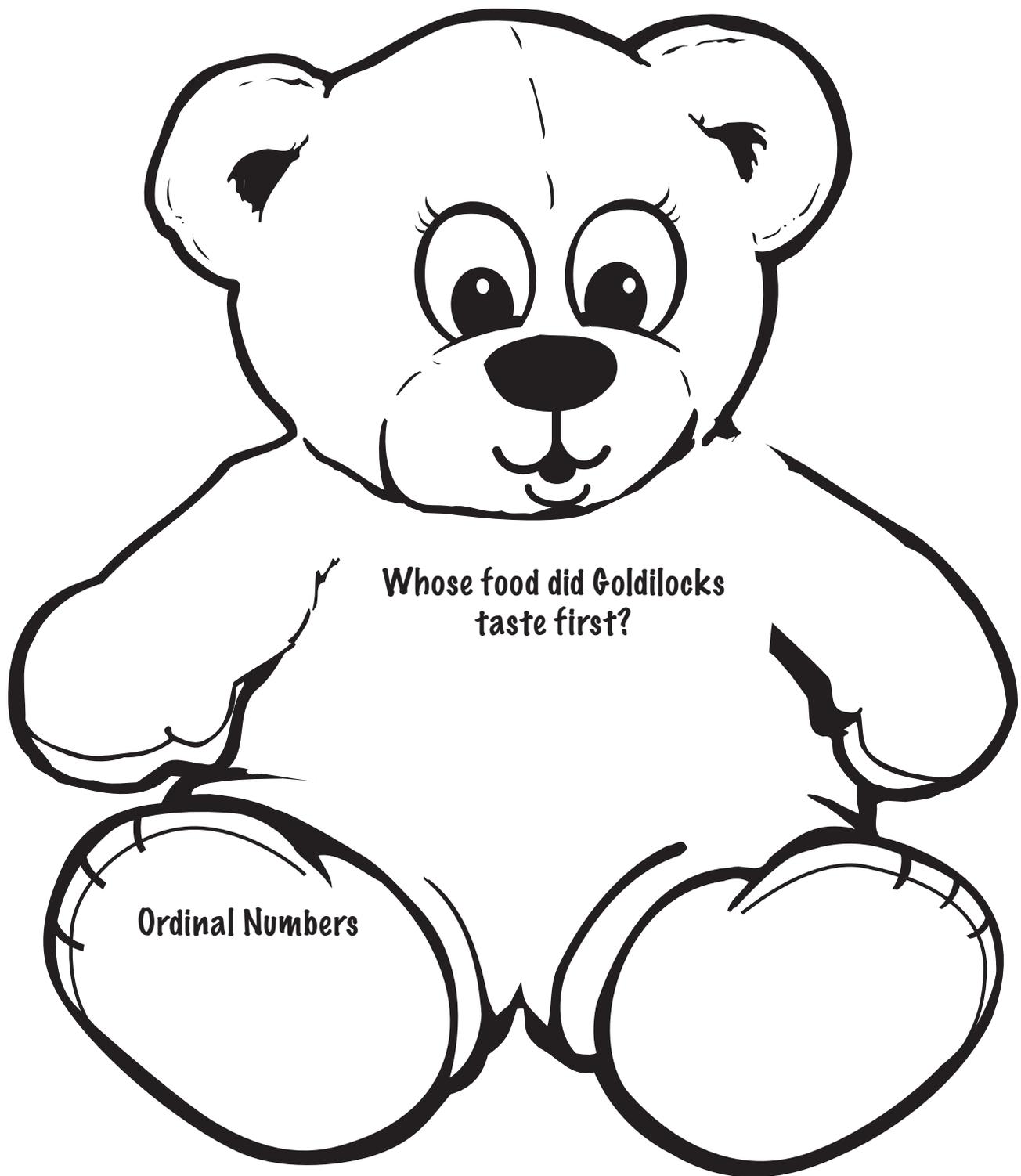
Objective 3: Recognize symbols and models used to represent features of the environment.

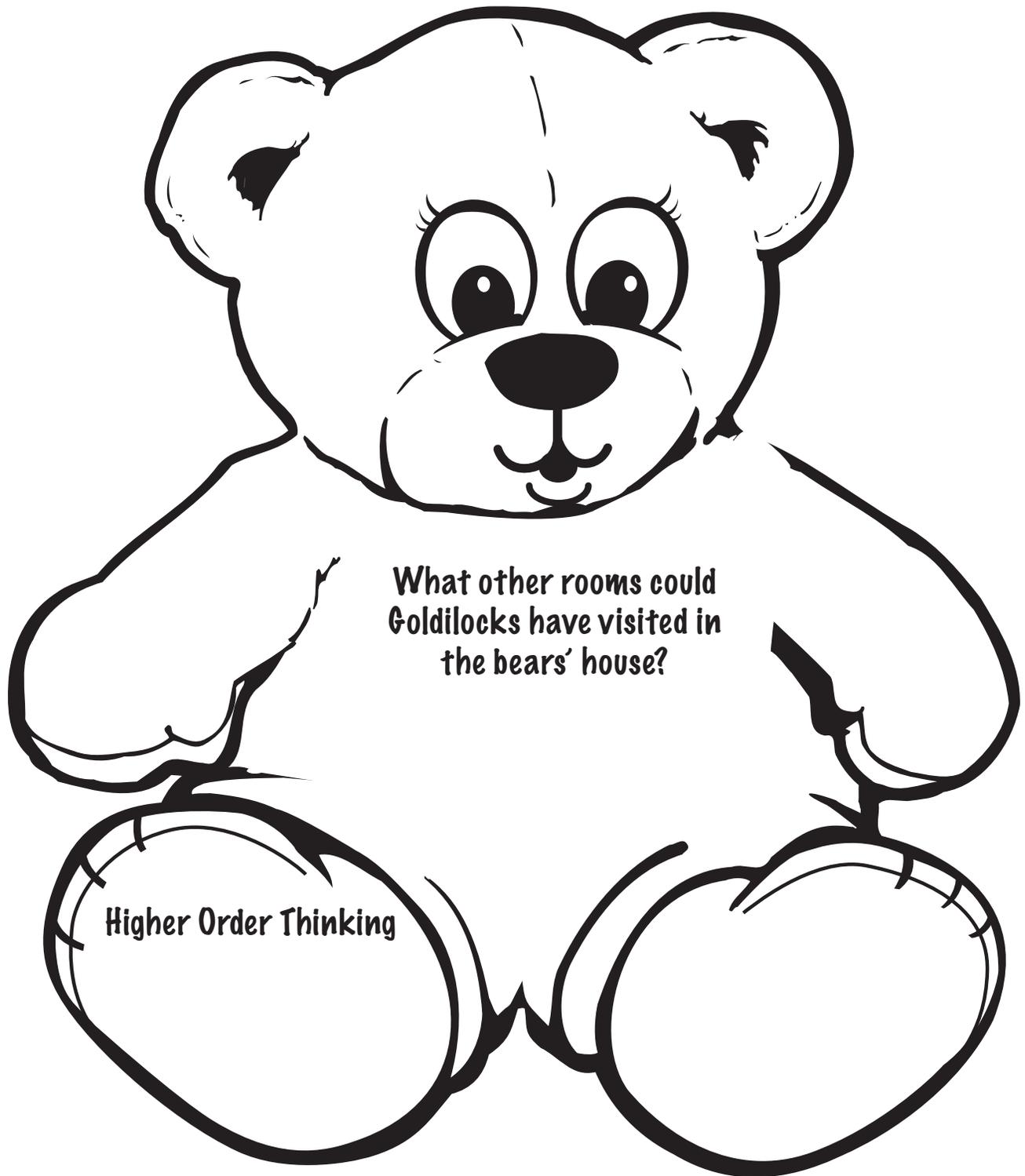
- a. Recognize that maps and globes are symbols for actual places.
- b. Identify items on a map of the classroom.
- c. Explore basic map and globe directions and characteristics (e.g., top, bottom, right, left, land, water, Arctic Ocean, Antarctica).
- d. Make representations of things observed in the environment (e.g., drawing, painting, building structures with blocks, making models with clay).

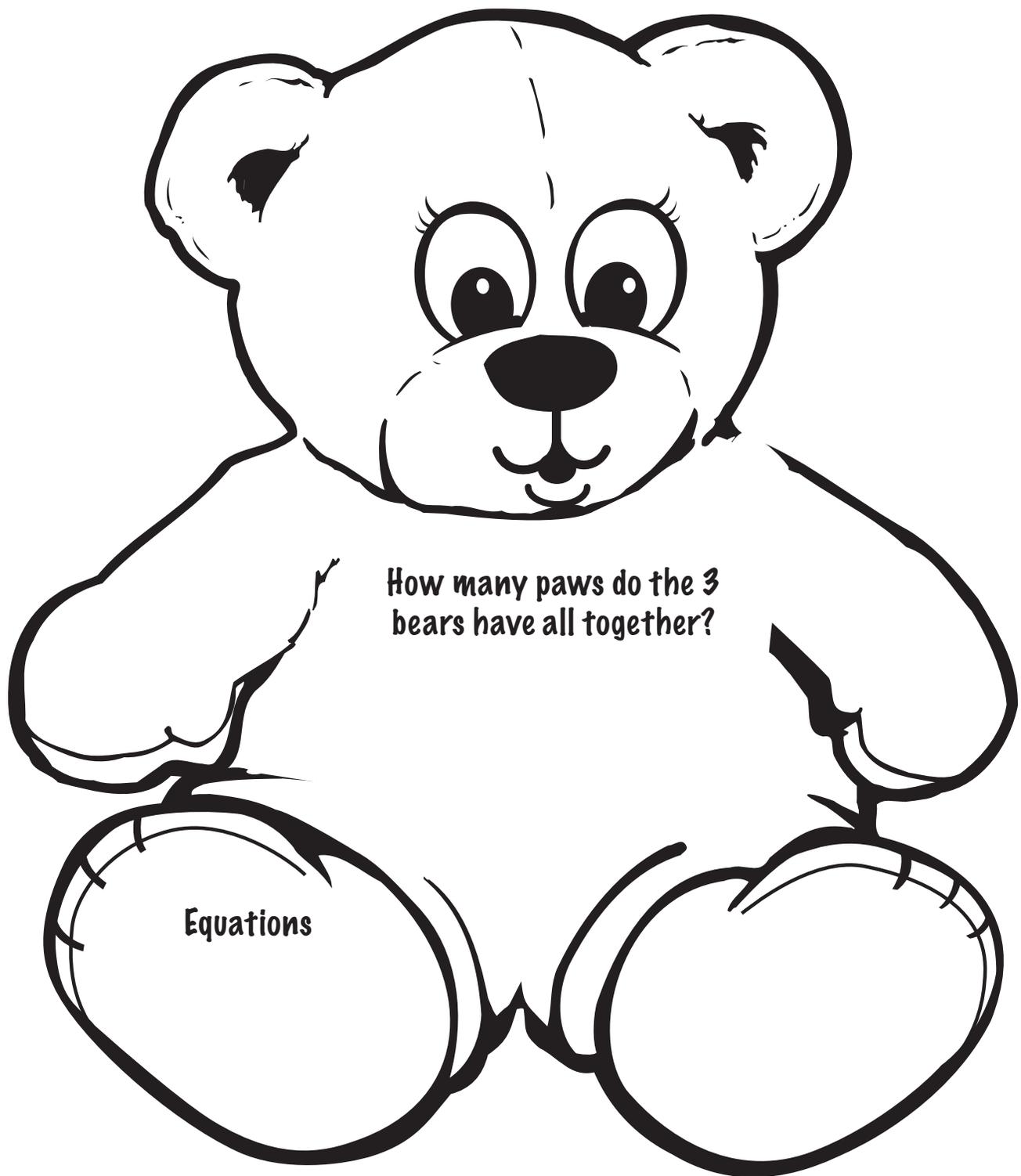
Facilitated Activities

Teddy Bear Manipulatives









Journal Prompts

What things did you like to do with your mother?

What things did your dad like to do in his spare time?

Tell about your wedding day.

Do you like rainstorms? Why or why not?

How do you feel about water? Playing in it? Seeing it?

Do you have a favorite author? Who, why, and tell about favorite books as a child, youth, adult.

Tell about pets you had as a child, youth, adult.

What do you think brings good luck?

What is your personal secret to happiness?

Where were you on 9-11?

Tell about family traditions-Christmas, birthdays, Easter, etc.

What would you like to be remembered for?

What is your greatest joy? Sorrow?

Explain a goal that you have now.

Tell about conditions surrounding your birth that you are aware of. How did you get your name?

Did you have a favorite toy as a child? Did it have a name? What memories are connected with it?

Describe your yard as a child.

What makes each of your brothers and sisters special? Be specific.

Describe a childhood birthday party.

Think back... was there a teacher or a class that had a great influence on you?

What games did you play in your house or neighborhood?

How did you like being the oldest, middle or youngest child?

Tell about where and when you learned to drive.

Tell about an interesting date that you went on.

What jobs did you have in high school and/or college?

What things are you most grateful for? List 5 and why.

Name _____

Learning Activity Paper #1



Name _____

Learning Activity Paper #2

	2		4			7		9	
		13					18		20
					25	26		29	



Name _____

Learning Activity Paper #3

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30



Math I-1 & 2

Activities

Number Sense

Who's On First?

Standard I:

Students will understand simple number concepts and relationships.

Objective 1:

Identify and use whole numbers up to 30.

Intended Learning Outcomes:

1. Demonstrate a positive learning attitude.
5. Understand and use basic concepts and skills.
6. Communicate clearly in oral, artistic, written, and nonverbal form.

Content Connections:

Language Arts VI-1; Vocabulary
 Language Arts VII-2; Strategies to comprehend text
 Language Arts VII-3; Recognize features of text
 Language Arts VIII-5; Use fluent and legible numeral writing

*Math
Standard
I*

*Objective
1*

Connections

Background Information

Integrating curriculum is easy when it comes to math and literature. There are so many wonderful books available that can not only enlighten students in literacy but strengthen math skills as well. Using literature is one of the easiest ways to teach students the use of ordinal numbers. We are constantly asking our students, “What happened first in the story?”

As Marilyn Burns, the creator and founder of Math Solutions Professional Development says, “Evidence shows that teaching math through children’s books motivates children to learn math in exciting new ways, encourages students to think and reason mathematically and builds students’ appreciation for math and literature.”

Many literature books today are written with an emphasis on mathematics. Teachers need to build a library of literature books with a mathematical connection. Using literature is a way to engage students in learning mathematics. It helps students understand that mathematics is connected to the real world and can solve real world problems.

Research Basis

Sutton, J. & Krueger, A. (Eds.). (2002). *ED Thoughts: What We Know about Mathematics Teaching and Learning*. Aurora, Co: *Mid-continent Research for Education and Learning*, p. 54.

In real life, learning experiences are not separated into academic disciplines or subject areas. A student’s classroom experiences should

mirror this. Interconnections among the disciplines, when emphasized at all grade levels, will support learning by making the mathematics curriculum more meaningful.

Burns, M. (2005). Lessons by Marilyn Burns Using Storybooks to Teach Math. *Instructor Magazine*. 27-30.

For many of us, the storybook shelf isn't the first place we go to when we start to plan a math lesson. But children's books can be a great math-teaching tool. They spark students' imaginations in ways that exercises in textbooks or workbooks often don't. When I visit classrooms, I find that connecting math to literature can boost the confidence of those who love books but are "Math-wary." And students who love the abstraction of math can learn to appreciate stories in a whole new way.

Caskey, M. (2001). A Lingering Question for Middle School: What is the Fate of Integrated Curriculum? *Childhood Education*, Vol.78.

A truly integrated curriculum enables teachers and their students to make connections between their school learning experiences and real life, while the separate subject approach leaves students with a disconnected view of knowledge that fails to reflect the way that real people attack problems in the real world.

Invitation to Learn

Use a fishing net and spread it out on the floor. Then go fishing for students. Pretend to throw out your fishing line and catch a student by name. Reel them in! Have the students stand in a row, on the net, in the order that they were caught. Ask questions: Who was the first fish to be caught? Who was the third fish to be caught? Continue asking questions. Upon completion of the questions, pretend to throw the fish back into the water. The game can continue by having a new angler.

Instructional Procedures

Stand in Line

1. Choose several students to stand in a line in front of the class.
2. Have the class count how many students are in the line.
3. Ask: Who's first? Second? Third?
4. Now, have the students turn the other direction so that the person that was last is now the leader.
5. Ask: Now, who's first? Second? Third?

Materials

- Fishing net
- Fishing line



Materials

- Ordinal Numbers Cards



6. Discuss how their places are different and why.
7. Students could also hold up cards with 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, and 10th.

This activity can be done anytime that the class is lined up. Use this activity all year to help reinforce ordinal counting.

Seven Blind Mice

Day One:

1. Read the book *Seven Blind Mice*, by Ed Young.
2. Integrate prediction strategies before reading the story (e.g., what will this story be about?).
3. As the story is read, point out the order in which the colored mice appear.
4. Once the story is read, have the students recall the different colors of the mice.
5. Post the colored mice (that you have colored from the *Seven Blind Mice Pattern*) as the students recall the colors.
6. Ask the students which colored mouse came first, second, third, fourth, fifth, sixth, and seventh. Move the mice into the correct order in which they appear in the story.

This is a great introduction to ordinal numbers.

Day Two:

Read the story again. Put the mice in order and write the ordinal numbers next to the colored mice (1st, 2nd, 3rd, 4th, 5th, 6th, and 7th).

Day Three:

1. Read the story again. Ask the students which days of the week each mouse appeared in the story.
2. Write the days of the week next to each mouse.

Day Four:

1. Pass out a copy of the *Seven Blind Mice Pattern* and have the students color each mouse according to the colors in the book and then cut out each mouse. Students can write the correct ordinal number or number on the back of the mice.
2. Pass out a copy of the *Elephant Pattern*. Have students color the elephant and then cut it out.
3. Use a large envelope to store the cutouts.

Materials

- Seven Blind Mice*
- Seven Blind Mice Pattern*
- Elephant Pattern*
- Colored Pencils or Crayons
- Envelope



Day Five:

1. Read the *Seven Blind Mice* story to the class.
2. Have the students use their mice and elephant to follow the story.
3. Students then retell the story to a friend using their cutouts. Students should be using ordinal numbers when retelling the story.

Where's Harley?

Day One:

1. Read the book *Where's Harley?*, by Carol and Amanda Felton.
2. Use prediction strategies before reading the story.
3. As the story is read, point out the different floors in the apartment building where Harley and the children can be found.

Day Two:

1. Display the apartment building floor mat.
2. Write 1st-10th on the index cards and label the floors of the apartment building.
3. Explain that in an apartment building the number of floors starts at the bottom and goes to the top.
4. What other things can you think of where the numbers start at the bottom and go to the top? Stairs, elevators, escalators, buildings, etc.
5. Identify on the apartment building mat where Harley started in the story and where he was finally found.
6. Have *Harley the Rabbit Pattern* colored, cut out, and laminated. Move Harley from where he started to where he was found.

Day Three:

1. Have the *Children* and *Harley Patterns* colored, cut out, and laminated ready to use.
2. Display the apartment building floor mat.
3. Read the story.
4. Retrace the route that Harley took through the apartment building and post the location of the children as you read the story. This will allow students to see why Harley was so difficult to find.

Materials

- Where's Harley?*
- Harley the Rabbit Pattern*
- Children Pattern*
- Apartment Building Floor Mat
- Index Cards
- Construction Paper
- Markers



Day Four:

1. Give each student his/her own copy of the *Children and Harley Patterns*. (Make Smaller)
2. Have students color and cut out the patterns.
3. An apartment building is made out of construction paper and markers. Make sure there are 10 floors in the apartment building.
4. Have the children put their cutouts and apartment building in a large envelope.

Day Five:

1. Have students remove their cutouts and apartment building from the envelope.
2. Read the story *Where's Harley?*
3. Have students move their cutouts to the appropriate place on the apartment building as the story is read.

Assessment Suggestions

- For *Seven Blind Mice*, check to see if students have written the correct ordinal number on the back of each mouse.
- Watch while the stories *Seven Blind Mice* and *Where's Harley?* are recreated by the students. Make sure that each student is putting items in the correct order/place.
- Student watching is the observation and recording of student's interactions during an instructional activity. These observations can be recorded on small sticky notes or an *Observation Sheet*.

Curriculum Extensions/Adaptations/Integration

- Literature books are the perfect extension for ordinal numbers. Students can recall the order of events from any book (e.g., ask the students what happened first, second, third, etc.).
- Everyday events in the classroom can be discussed using ordinal numbers (e.g., the first thing we do when we get to school is?).
- The fishing net, from the invitation to learn, could be used to have students identify attributes or patterns.
- Have a classroom contest and give prizes using the words first place, second place, third place, etc.

- Use stuffed animals and have the students line them up. Ask students which animal is first? Second? Third? Turn the animals around and ask the same questions.
- The calendar is a perfect way to introduce ordinal numbers. Point out to students that when we say the date, we are using ordinal numbers.
- Sequencing activities lend themselves nicely to the use of ordinal numbers.

Family Connections

- Send home the envelope containing the cut out mice and elephant from the *Seven Blind Mice* book and the cutouts from *Where's Harley?* Have the students retell these stories to their parents using the ordinal numbers.
- Check out the book *Where's Harley?* and have the students explain to their parents how Harley moves from floor to floor. Encourage the students to use the ordinal number vocabulary to explain what is happening in the story. The activities at the back of the book could also be done at home.
- Have the students fill out a paper explaining their routines at home using ordinal numbers (e.g., getting up in the morning, after school, and getting ready for bed).
- Send home a monthly calendar and encourage the students to use ordinal numbers when explaining the dates on the calendar.

Additional Resources

Books

10 Little Rubber Ducks, by Eric Carle; ISBN 0-060-74075-2

First, Second, by Daniel Kharms; ISBN 0-374-32339-9

Henry the Fourth, by Stuart J. Murphy; ISBN 0-06-446719-8

On the Stairs, by Julie Hofstrand Larios; ISBN 1-886910-34-0

Seven Blind Mice, by Ed Young; ISBN 0-329-04408-7

The Hat, by Jan Brett; ISBN 0-399-23101-3

The Mitten, by Jan Brett; ISBN 0-590-44015-2

The Twelve Days of Christmas, by Jack Kent; ISBN 0-590-06163-1

The Twelve Days of Kindergarten, by Deborah Lee Rose; ISBN 0-8109-4512-6

The Twelve Days of Summer, by Jan Andrews; ISBN 1-55143-365-6

The Twelve Days of Winter, by Deborah Lee Rose; ISBN 0-439-92932-6

Where's Harley?, by Carol and Amanda Felton; ISBN: 1-57565-132-7

Web sites

<http://www.mathsolutions.com>

<http://coreacademy.usu.edu> (Materials Kindergarten 2008, Materials First Grade 2006)

<http://illuminations.nctm.org> (Math Lesson Plans)

<http://kidscount1234.com>

http://lessonplanz.com/Lesson_Plans/Mathematics/_Grades_K-2/index.shtml

<http://mrspohlmeyerskinderpage.com/mathsense.htm>

<http://www.alfy.com> (On-line Math Games)

<http://www.drmaggieallen.net>

<http://www.funbrain.com>

<http://www.kellyskindergarten.com/math/mathactivities>

http://www.kidport.com/GradeK/Math/NumberSense/MathK_Sequence.htm (On-line Math Games)

<http://www.kidport.com/GradeK/Math/NumberSense/MathKNumbers.htm> (On-line Math Games)

<http://www.littlegiraffes.com>

<http://www.mathsolutions.com>

<http://www.theteacherscorner.net/lesson-plans/math/numbersense/index.htm>

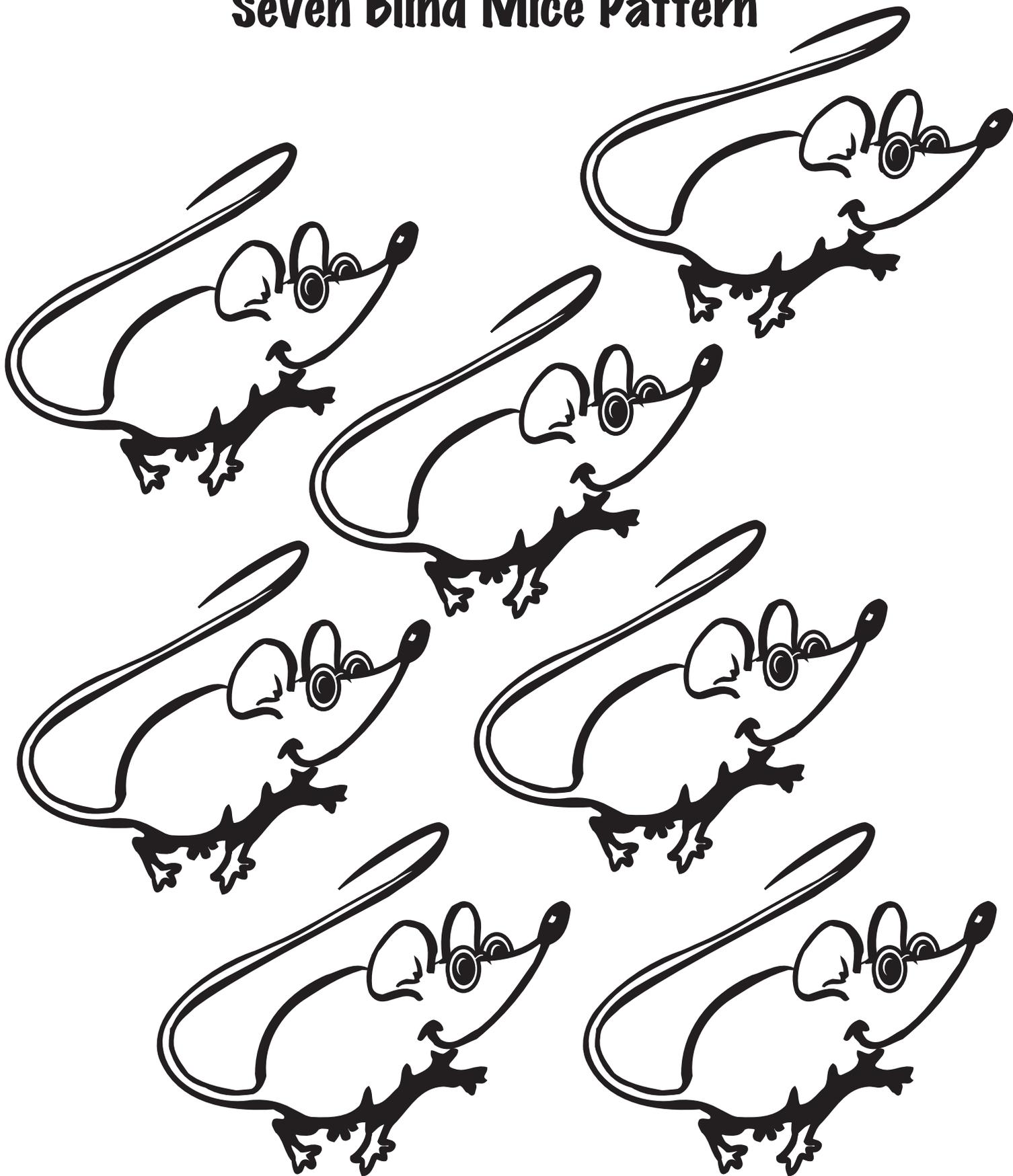
<http://www.toddervillage.net>

Organizations

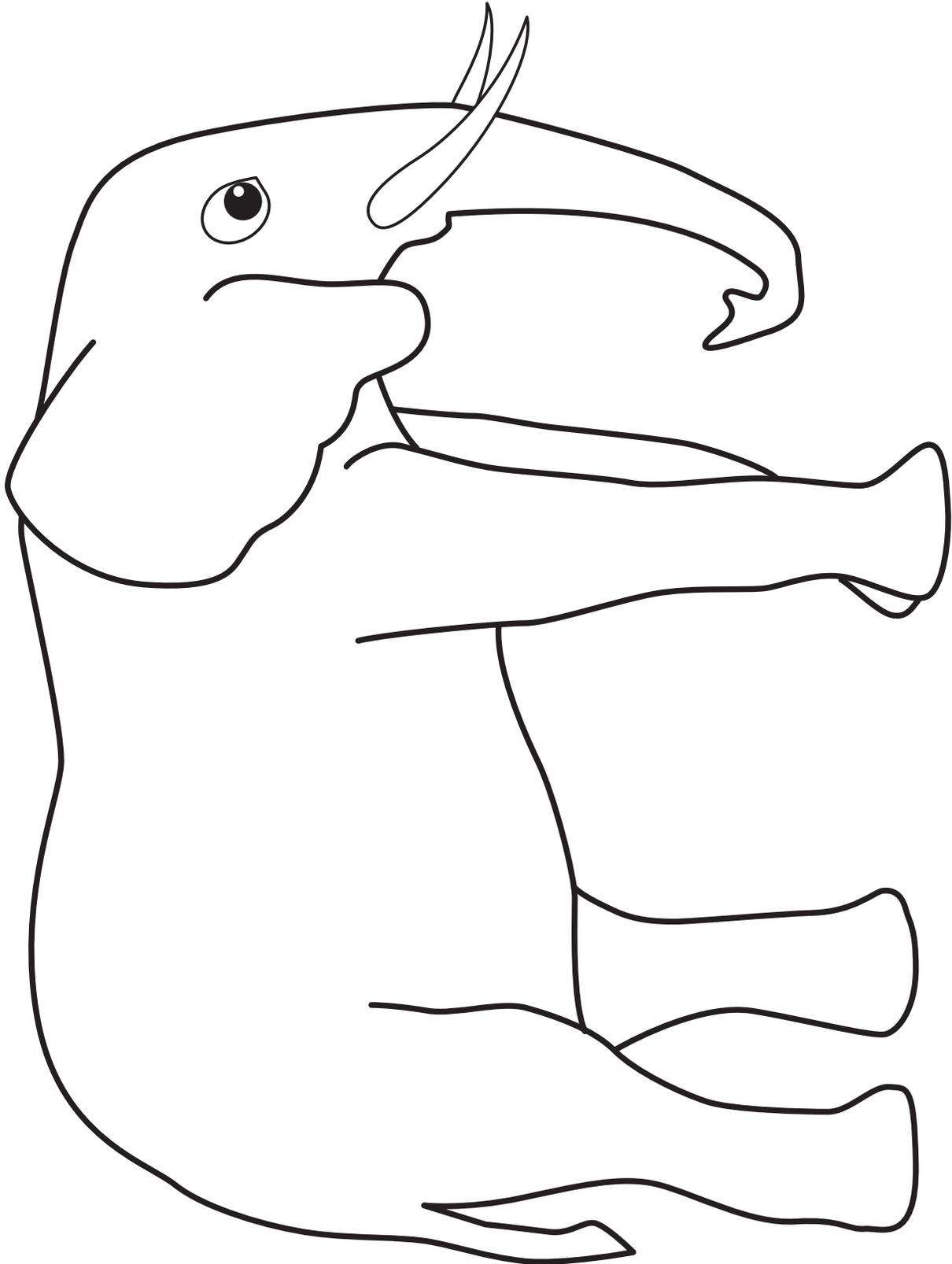
National Council of Teachers of Mathematics, 1906 Association Drive, Reston, VA 20191-1502 (703) 620-9840, <http://www.nctm.org>

National Association for the Education Of Young Children, 1509 16th St. N.W., Washington, DC 20036 (202) 232-8777 or (800) 424-2460, <http://naeyc.org>

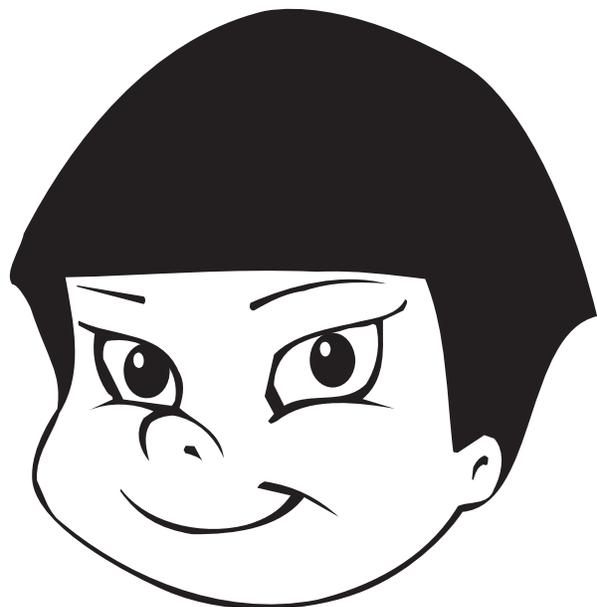
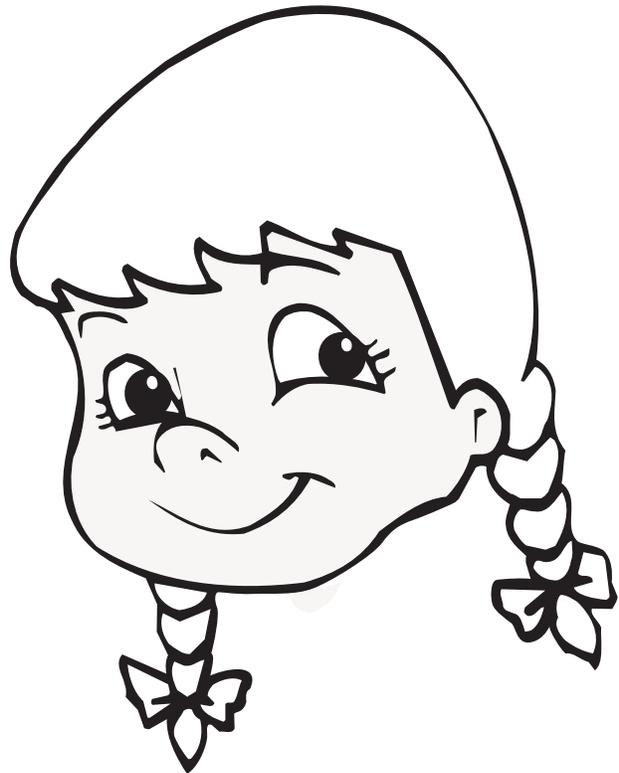
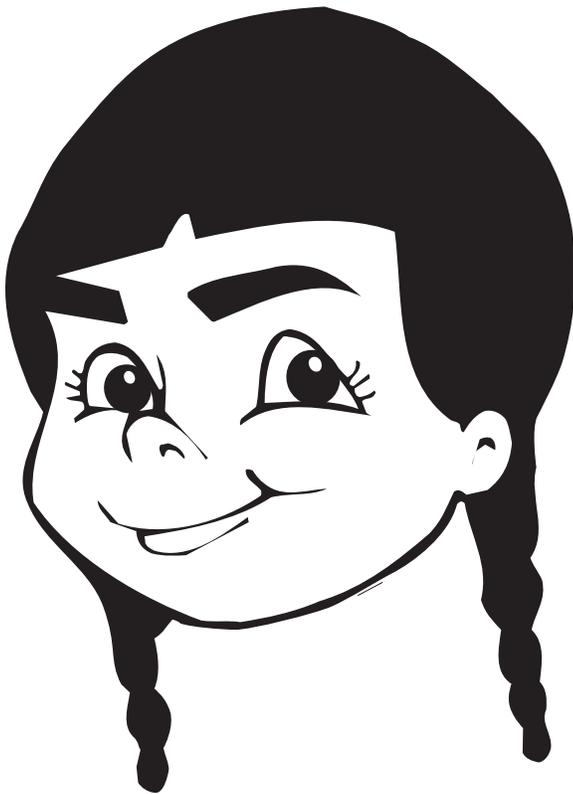
Seven Blind Mice Pattern



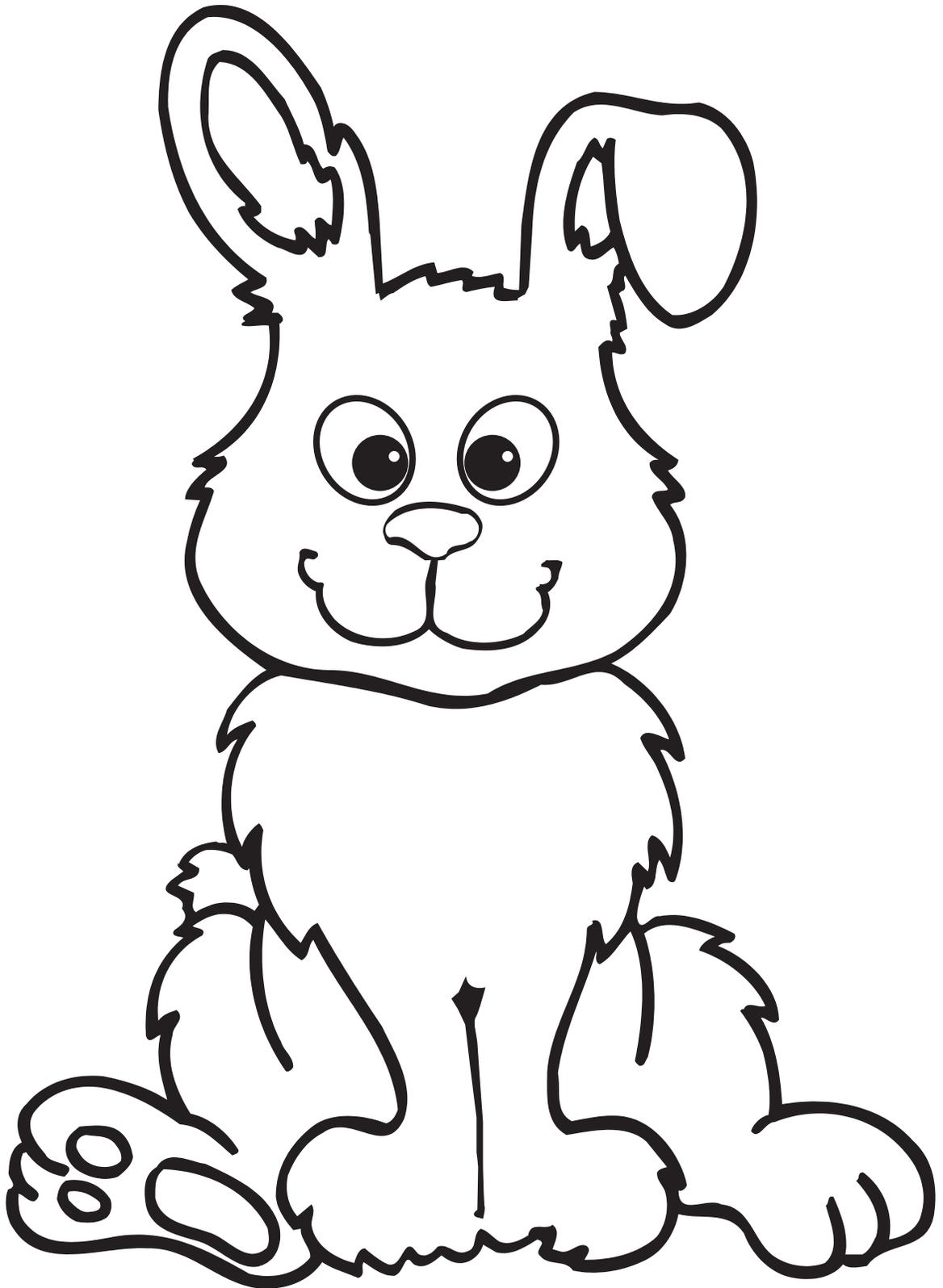
Elephant Pattern



Children Pattern



Harley the Rabbit Pattern



Observation Sheet

Name	Comments
1	
2	
3	
4	
5	
6	
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More, Fewer, Same

Standard I:

Students will understand simple number concepts and relationships.

Objective 2:

Identify and use simple relationships among whole numbers up to 30.

Intended Learning Outcomes:

1. Demonstrate a positive learning attitude.
5. Understand and use basic concepts and skills.
6. Communicate clearly in oral, artistic, written, and nonverbal form.

Content Connections:

Math III-2; Units of measurement

*Math
Standard
I

Objective
2*

Connections

Background Information

Students that are successful in math have learned to link numbers to quantities. This is the first and most significant step in being a successful mathematician. Many students have an easy time counting but a difficult time when asked to put a number to that which was counted. They may also have a difficult time when the questions, “Which is fewer, 2 or 4?” or “Which is more, 2 or 4?” are asked. It is essential that students have opportunities to explore number combinations and that they are asked these important questions.

The vocabulary of more, fewer, and the same is an integral concept at the early stages of mathematical learning. At the beginning of the school year, most students understand the concept of more. Do not assume because they know which set has more that in turn they know which set has fewer. The vocabulary terms more, fewer and same have to be taught. The vocabulary of math is going to impact how students express their mathematical thinking and future math success. Quantity discrimination is extremely important because it is a key component in estimation and number representation.

Students will be entering your classroom this fall with a variety of informal or formal instruction on number concepts that they bring from home and pre-school. There is going to be a need to differentiate your instruction in number sense.

Research Basis

Burns, M. & Silbey R. (April 2001). Math Journals Boost Real Learning. *Instructor Magazine*. p.18-20.

A math journal is one of the best ways to introduce writing into your math class. It helps students stretch their thinking and

make sense of problems that can sometimes leave them confused or frustrated. When children write in journals, they examine, express, and keep track of their reasoning, which is especially useful when ideas are too complex to keep in their heads. By reading their journals, you can evaluate their progress and recognize their strengths and needs. The math journal thus becomes a great learning tool for your students—and you.

Ediger, M. (2006). Writing in the Mathematics Curriculum. *Journal of Instructional Psychology*. Vol. 33.

Criteria for Use in Mathematics Writing:

1. Learning needs to be meaningful. Students need to make sense out of what is being learned.
2. Interest is a powerful factor in learning. Mathematics teachers need to provide for the interests of the learner. A hands-on approach should also be stressed to add interest.
3. Students should perceive a purpose in the writing experience. Writing should not be done for the sake of doing so, but rather to achieve a definite goal.
4. Students should work individually as well as collectively in ongoing learning experiences.

Invitation to Learn

Materials

- Deck of Cards
- Alligator Puppet



Use a large deck of playing cards (remove the face cards) or multiple cards numbered from 1-10. Play the card game Who Has More? There are two teams/players in this game. Shuffle the deck of cards and place the stack of cards face down on a table. Each team turns over one card at a time and says the number on their card. The team with the highest card keeps both cards. If the cards have the SAME number, the cards are put aside. The teams/players each turn over another card until someone has the highest number. The winner takes all the cards. When the cards have all been used from the stack, the game ends. The teams/players then put their stack of card next to each other and estimate who is the winner. The winner of the game is the team/player with the most cards. An alligator puppet could be used to eat the card that has more. Point out how the alligator puppet has his mouth open looking for more to eat.

Instructional Procedures

Group Activity

1. Introduce the words more, same, and less. Talk about how the words less and fewer mean the same thing and that you will be using both of these math words.
2. Have the students look at the book cover and predict which group of flowers has more and which group has less.
3. Read the book *More or Less* to the class and have them predict the correct answers to the questions that are asked.
4. Go back through the book and have your students come up with their own more/less/same questions.
5. This book can be used over and over again. The photographs lend themselves to further exploration.

Center 1: Alligator More/Fewer

Part One:

1. Each student will need a copy of the *Alligator More and Fewer* recording sheet and two number cubes.
2. Explain that the alligator wants to eat the number that is more.
3. The student rolls the two numbered cubes.
4. The number that is more is written on the left side of the paper so that it visually looks like the alligator is going to eat it up!
5. The number that is less is written on the right side.
6. If the student rolls two numbers that are the same, he/she needs to roll again. The alligator cannot eat numbers that are the same.
7. The alligator's mouth looks like the symbol for more. Use this great introduction to teach students the symbols of greater than, less than, or equal.

Part Two:

1. A student rolls two number cubes and then arranges them to make the largest number and the smallest number (e.g., the roll 3 and 6 should be arranged as 63 for the largest number and 36 for the smallest number).
2. Students record this on the *Alligator More and Fewer* recording sheet. The number that is more should be written on the line so that it visually looks as if the alligator is going to eat it up!

Materials

- More or Less?*



Materials

- Alligator More and Fewer*
- Number cubes
- Pencil



3. The number that is the least should be written on the line behind the alligator's mouth.
4. If the student rolls two numbers that are the same, he/she needs to roll again. The alligator cannot eat numbers that are the same.

Materials

- More/Fewer/Same*
- Pencil
- Counters
- Cup



Center 2: Counter Toss

1. Students take a specific number of two-sided counters (e.g., 10, 20, 30 counters)
2. Put the counters in a cup.
3. Shake the cup and the counters
4. Dump the counters onto the table.
5. Sort the counters by color.
6. Record the toss on the *More/ Fewer/ Same* recording sheet.
7. Math Journal: This activity could be recorded in a journal and have the student draw the alligator on their paper.

Materials

- More/Fewer/Same Spinner*
- Interlocking cubes



Center 3: More/Fewer/Same Spinner Game

1. This is a partner game that can be done in a center or as a group.
2. Each partner begins the game with ten interlocking cubes.
3. The first student spins the spinner that is marked More/Fewer/ Same.
4. If the spinner lands on more, the player takes one interlocking cube from his/her partner.
5. If the spinner lands on fewer, he/she has to give one interlocking cube to his/her partner.
6. If the spinner lands on same, they just stay the same.
7. The winner is decided when one player has all of the interlocking cubes.

Materials

- Three Hoops
- Manipulatives
- Index Cards
- Math journal
- Pencil



Center 4: Hoop Fun

Part One:

1. Students take a small handful of two different manipulatives.
2. Put the manipulatives in two piles.
3. Count the number of manipulatives in each pile.
4. Use the sorting hoops on the floor.
5. Label index cards with the words More, Fewer, and Same.

6. Place the labeled index card above the sorting hoops.
7. Place the manipulatives inside the appropriate hoop. The manipulatives that have more go into the hoop labeled more. The manipulatives that have less go into the hoop labeled less. If the manipulative groups are the same, place all of them in the hoop labeled same.
8. Journal Activity- This activity could be recorded in a math journal. Students will need to draw three circles in their journals. Have the students label the three circles with More/Fewer/Same. Have students draw a picture to represent the manipulatives in each circle.

Part Two:

1. Follow the same procedure but use only two circles.
2. Cross the circles to create a Venn diagram.
3. Journal Activity- Have the students draw a Venn diagram in their math journals. Have the students label the Venn diagram *More/Same/Fewer*. Have students draw a picture to represent the manipulatives in each space of the diagram.

Center 5: Tower Power

1. This game may be played as partners.
2. Each player rolls a number cube.
3. Players build their towers, using the interlocking cubes, according to the number that they rolled.
4. With the towers built, have one player spin the More/Fewer/Same Spinner.
5. If the spinner lands on more, the student who has the most blocks takes all of the towers.
6. If the spinner lands on fewer, the student with the fewest blocks takes all of the towers.
7. If the spinner lands on same, the students do not exchange blocks.
8. The winner of each round will set aside the towers that they won.
9. The process is repeated with each player rolling the number cube and building a new tower.
10. Players take turns spinning the spinner.
11. The game ends when there are no more blocks to make towers.

Materials

- Number Cubes
- Interlocking Cubes
- More/Fewer/Same Spinner
- Pencil



12. Students could use a chart and keep track of wins by making tally marks.

Center 6: More/Fewer/Same Balance

1. Students are given a group of manipulatives.
2. One student puts a chosen number of manipulatives on one side of the balance and another student puts a chosen number of manipulatives on the opposite side of the balance.
3. Compare the manipulatives by looking at the balance to see which way it is leaning. (Students have been taught that the larger the number the more it weighs.)
4. The students then compare the number of manipulatives.
5. Which group has more?
6. Which group has less?
7. The manipulatives are taken off of the balance one side at a time and counted.
8. The students findings are recorded on the *More/Fewer/Same* recording sheet.
9. The number of manipulatives may be increased as students become number proficient.

Materials

- Simple Balance
- Manipulatives
- More/Fewer/Same*
- Pencils



Assessment Suggestions

- The math journal is an excellent way for you to evaluate a student's mathematical thinking.
- Observations: These can be recorded on small sticky notes or on an *Observation Sheet*. Make notes about students that need to be pulled into a small group for extra help.
- A *Math Check list* is kept to keep track of students' progress.
- Ask probing questions to focus students' thinking when using manipulatives.
- Have students share their thinking about the activity.
- Collect any recording sheets. This will give you time to make an in-depth assessment of a student's number sense.

Curriculum Extensions/Adaptations/Integration

- Use the different stages of activities to meet the needs of your students.
- Ask mathematical questions during Language Arts and Content time.
- All students can use centers. Adaptations in quantity of numbers can be adjusted to meet the specific needs of each student.
- Center activities should be taught to the whole group and then placed in a center for students to practice and become proficient in the subject matter.

Family Connections

- Have the students take home a *More and Fewer* recording sheet. Have the students look around their houses. Tell them to draw/write the name of something they have more of in their homes and something that they have less of in their homes (e.g., draw a picture of a chair in the more column and a picture of an oven in the less column).
- The alligator puppet could be sent home with a *More and Fewer* recording sheet. The students and their families could look around their homes for items that they have more/fewer of and record their findings on the recording sheet.
- Math Night- Parents would be invited to make the math activities for their homes.

Additional Resources

Books

Just Enough Carrots, by Stuart J. Murphy; ISBN 0-06-026778-X (Children's Book)

Moo-ving into Math Journals, by Margaret Allen, Ph.D.; ISBN 0-9722832-0-X (Professional Book)

More or Less?, by Judy Nayer; ISBN 1-56784-954-7 (Big Book)

More, Fewer, Less, by Tana Hoban; ISBN 0-688-15694-0 (Children's Book)

Web sites

<http://coreacademy.usu.edu> (Materials 2008)

<http://illuminations.nctm.org> (Math Lesson Plans)

<http://kidscount1234.com>

http://lessonplanz.com/Lesson_Plans/Mathematics/_Grades_K-2/index.shtml

<http://mrspohlmeyerskinderpage.com/mathsense.htm>

<http://www.aaamath.com/cmpk1a-morefewer.html> (On-line Math Game)

<http://www.alfy.com> (On-line Math Games)

<http://www.drmaggiellen.net>

<http://www.funbrain.com>

<http://www.kellyskindergarten.com/math/mathactivities>

http://www.kidport.com/GradeK/Math/NumberSense/MathK_Sequence.htm (On-line Math Games)

<http://www.kidport.com/GradeK/Math/NumberSense/MathKNumbers.htm> (On-line Math Games)

<http://www.littlegiraffes.com>

<http://www.mathsolutions.com>

<http://www.theteacherscorner.net/lesson-plans/math/numbersense/index.htm>

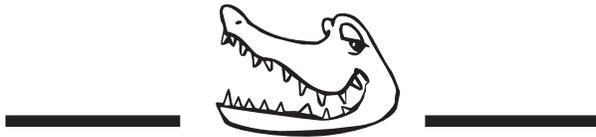
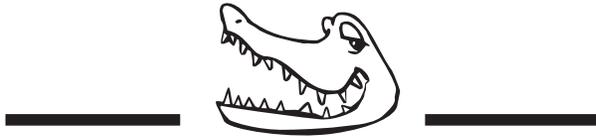
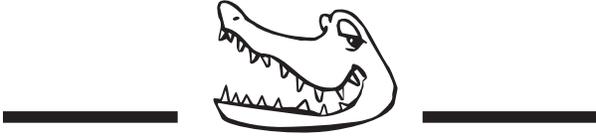
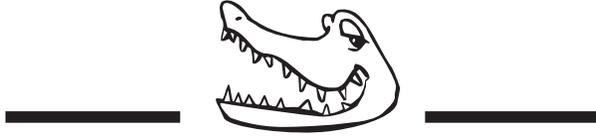
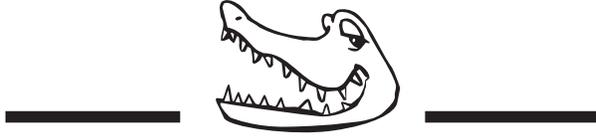
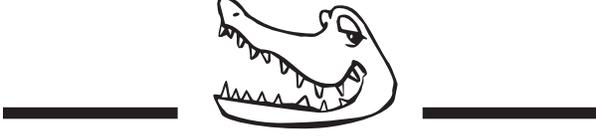
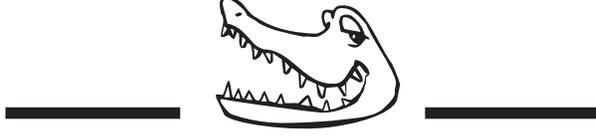
<http://www.toddervillage.net>

Organizations

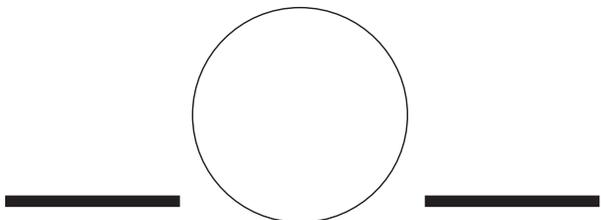
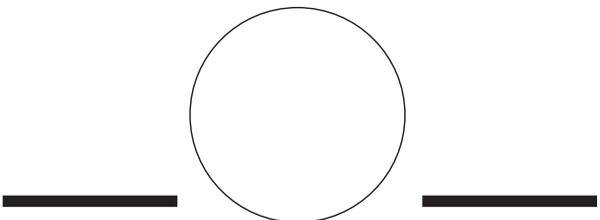
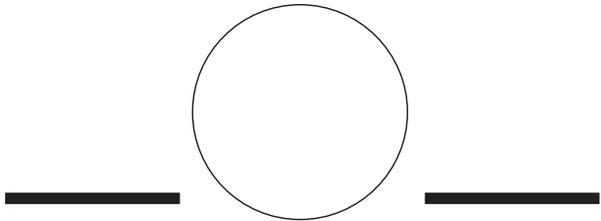
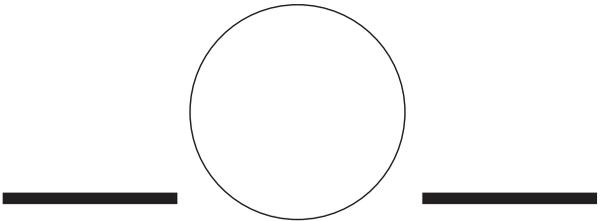
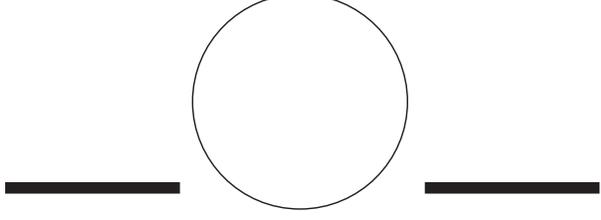
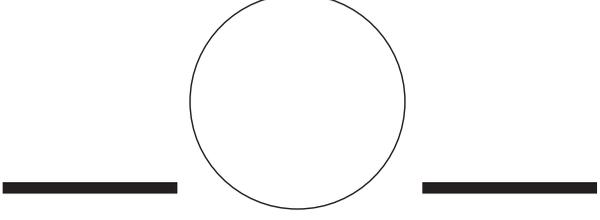
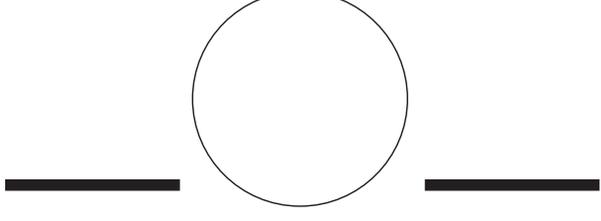
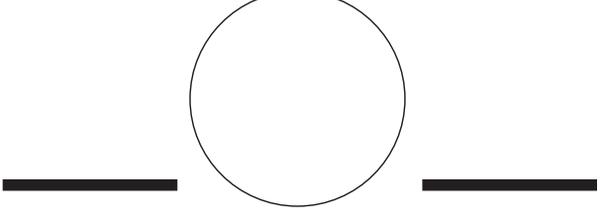
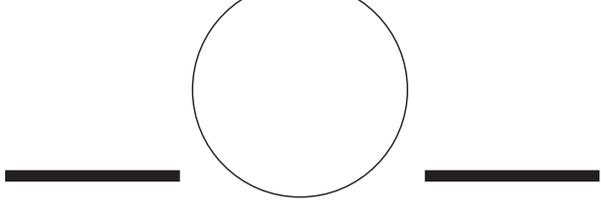
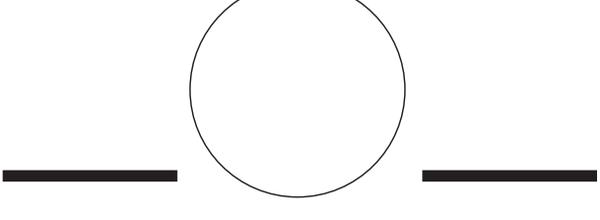
National Council of Teachers of Mathematics, 1906 Association Drive, Reston, VA 20191-1502 (703) 620-9840, <http://www.nctm.org>

National Association for the Education Of Young Children, 1509 16th St. N.W., Washington, DC 20036 (202) 232-8777 or (800) 424-2460, <http://naeyc.org>

Alligator More and Fewer

More/Fewer/Same

Math Check List

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Numbers Through the Year

*Math
Standard
I*

*Objective
1*

Connections

Standard I: Students will understand simple number concepts and relationships.
Objective 1: Identify and use whole numbers up to 30.
Intended Learning Outcomes: 1. Demonstrate a positive learning attitude. 5. Understand and use basic concepts and skills. 6. Communicate clearly in oral, artistic, written and nonverbal form.
Content Connections: Mathematics III-2; Comparing measurable attributes, Language Arts I-1; Listening, Language Arts III-1; Counting, Language Arts V-1; Reading grade level text, Language Arts VIII-5; Using fluent and legible numeral writing

Background Information

Number sense is described as a person's ability to understand and use numbers. Some scientists believe that humans are born with number sense or an innate ability to comprehend, process, and manipulate numbers. If we in fact have this innate ability then why do so many people struggle with mathematics? We need to cultivate a positive attitude towards math. This will certainly help facilitate confidence in our students thus improving student achievement.

Here are some suggestions of activities that will help build a student's confidence in math:

- Encourage students to explore groups of objects using manipulatives.
- Talk about numbers!
- Give students an opportunity to use numbers to solve problems.

Students struggling with number sense should be explicitly taught number representation, number comparison, number order, number patterns, number estimation, and joining and separating of number sets. Helping students build number sense right from the start, in kindergarten, gives students the background and the confidence they will need to succeed in the future with mathematics.

Research Basis

Clements, D. H. (1999). 'Concrete' manipulatives, concrete ideas. *Contemporary Issues in Early Childhood*, 1(1), 45-60.

Students who use manipulatives in their mathematics classes usually outperform those who do not. This benefit holds across grade level, ability level, and topic, given that use of a manipulative “makes sense” for that topic. Manipulative use also increases scores on retention and problem solving tests. Attitudes toward mathematics are improved when students have instruction with concrete materials provided by teachers knowledgeable about their use.

Burns, M. (April 1996). How to Make the Most of Math Manipulatives. *Instructor Magazine*. 45-50.

7 Musts for Using Manipulatives:

1. Talk to students about why manipulatives help them learn.
2. Set ground rules for using materials.
3. Set up a system for storing materials and familiarize students with it.
4. Time for free exploration is worth the investment.
5. Post class charts about manipulative materials.
6. Manipulatives are a natural for writing assignments.
Manipulatives provide concrete objects for children to describe.
7. Let parents get their hands on manipulatives, too. It's important for parents to understand why their children are using materials.

Moyer, P. & Jones G. (2004). Controlling Choice: Teachers, Students and Manipulatives in Mathematics Classrooms. *School Science and Mathematics*. Vol. 104.

Manipulatives are designed to represent explicitly and concretely abstract mathematical ideas. Research on their use has shown that students who use manipulatives during learning outperform those who do not.

Invitation to Learn

Introduce the Tricky Teen Song on a chart. Later, have the students hold up number cards as you sing the song.

The Tricky Teen Song

(Tune: “Row, Row, Row Your Boat”)

Do you know the tricky teens?

Sing them with me!

1 0 is ten.

1 1 is eleven.

1 2 is twelve.

1 3 is thirteen.

1 4 is fourteen

1 5 is fifteen.

1 6 is sixteen.

1 7 is seventeen.

1 8 is eighteen.

1 9 is nineteen.

Now you know the tricky teens!

You sang them with me.

Tricky teens are lots of fun.

Wouldn't you agree?

Instructional Procedures

Materials

- 2 Small rings per child
- Index cards
- Scissors



Number Generator

1. Each child will need 7 plain index cards.
2. Cut 6 index cards in half.
3. Use one full index card as the back of the Number Generator.
4. Have students write numbers 1, 2, and 3 on individual cards.
5. Punch the cards at the top left corner.
6. Attach numbers 1-3 with a ring on the left side of the full index card. (Numbers should be in order.)
7. Have students write numbers 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 on individual cards.
8. Punch the cards at the top right corner.
9. Attach numbers 0-9 with a ring on the right side of the full index card. (Numbers should not be in order)
10. Now, you are ready to make numbers from 0-30.
11. Have the students make numbers with the Number Generator and hold it up for you to assess their success.

The Plate Game

Stage One:

1. Divide the class into groups of 3-4 students.
2. Provide each group with paper plates numbered from 0-10 (not in order).
3. Spread the groups out around the room.
4. Inform the students that each team needs to put the plates in the correct number order.
5. Give the signal to begin!
6. Have the team sit down when they have put their plates in the correct number order.
7. The first team that sits down and has their paper plates in consecutive order wins.

Stage Two:

1. Divide the class into groups of 3-4 students.
2. Provide each group with manipulatives. (Remember, you will need more manipulatives for higher numbers.)
3. Students are informed that the team that puts the plates in correct number order, with the correct number of manipulatives on their plates will be pronounced the winner.
4. Give the signal to start the game.
5. Have the teams sit down when they have completed the task.
6. Check the performance of the team that sits down. Make sure that their plates are in number order and count, with the group, the manipulatives on each plate. If they are correct, they are pronounced the winners.
7. The game continues if the first team makes a mistake and is eliminated from the competition.
8. This process continues until a winner is declared.

Ring and Do

Part One:

1. Each student has his/her own paper plate and access to small manipulatives.
2. The teacher/student draws a number card but does not show it to the group.

Materials

- Paper plates
- Manipulatives



Materials

- Paper Plates
- Manipulatives
- Bell
- Number Cards
- Markers/Chalk
- Response Board



3. The teacher/student rings the bell the number of times indicated on the number card.
4. Each student puts that number of manipulatives on their paper plate.
5. As a group, count to the number on the number card as the students remove the manipulatives from their plates.
6. Check for understanding.

Part Two:

1. Each student has a chalkboard/marker board and a writing utensil.
2. The teacher/student draws a number card but does not show it to the group.
3. The teacher/student rings the bell the number of times indicated on the number card.
4. Each student then writes down the number of rings that he/she heard.
5. As a group, students show their answers by holding up their boards.
6. Check for understanding.

Materials

- Number Pocket Chart
- Number Cards



What's Missing?

1. Have a number pocket chart displayed at the front of the classroom.
2. Place the numbers in a pattern on the number chart. (Use different patterns throughout the year.)
3. Secretly remove a number from the number chart.
4. Have one student identify the color of the missing number and another student identify the missing number.
5. Point out how each child came up with his/her answer. (This is valuable for students who are having a difficult time coming up with an answer.)
6. Continue this process several times.

Materials

- Ten-Frame Dot Cards
- Blank Ten-Frames
- Counters



Memory Frames

1. Each student is given a *Blank Ten-Frame Card*.
2. The teacher has a variety of *Ten-Frame Dot Cards*.
3. The teacher holds up one *Ten-Frame Dot Card* for 5 seconds.

4. The students are asked to use the counters to reproduce the dot card that was shown.
5. Students are told to complete the task quickly and to the best of their ability.
6. The teacher walks around checking progress.
7. The teacher displays the *Ten-Frame Dot Card* that was shown to the group.
8. Ask: How many put the counters in the correct place?
9. Ask: How many knew the right number but had the counters in the wrong place?

This game can be used all year. Teachers can hold up two or three *Ten-Frame Dot Cards* at a time to make numbers up to 30.

Center 1: Number Stamp

1. Each student will receive a *Number Stamp* recording sheet.
2. Students will stamp a number in one or two boxes on the left side of the sheet (e.g., If the student stamps a number 1 and a number 6 then he/she creates the number 16).
3. Students will then use a marker stamp pen and stamp the corresponding amount in the box on the right side of the recording sheet (e.g., The student will stamp with the stamp pens 16 times).
4. Students can use this activity to create numbers from 0-99.
5. Students should use the red marker to self-correct their paper.
6. Journal Activity: Stamp a number on the journal page and use the marker stamps to represent that number.

Center 2: Bead Counters

Stage One:

1. The *Numbered Bead Cards* will need to have a hole punched on the right side (not close to the edge).
2. Knot a shoelace at the back and the front of the *Numbered Bead Cards*.
3. Have the students look at the first number on the *Numbered Bead Card* and string the beads on the shoelace to match that number.
4. Have the students put a paper clip on the end of the completed shoelace. This will hold the beads in place until the teacher can check it.

Materials

- Number Stamp*
- Number Stamps
- Stamp Pad
- Marker Stamp Pens
- Red Marker
- Math Journal



Materials

- Numbered Bead Cards*
- Shoelaces
- Beads
- Paper Clips
- Paper Punch



5. Have the students count the beads that have been strung and self-correct their work.
6. Students repeat this process with the next number on the card.
7. Students may have time to complete several cards during a center time.
8. Journal Activity- Have the students choose one number card to represent in their journal. Have the students write the number, draw a line on their paper, and then color circles to represent the beads that were strung on the card.

Stage Two:

The beads could be strung in patterns.

Materials

- Spin-A-Number
- Game Spinners
- Crayons/Colored Pencils
- Red Marker
- Math Journal



Center 3: Spin-A-Number

1. Each student will need a *Spin-A-Number Recording Sheet*.
2. Students spin the spinner.
3. Students will write the number on the recording sheet and then color in that number of squares to represent the number.
4. This process continues by spinning again and recording the number until the sheet is completed.
5. Have students self-correct their work with the red marker.
6. Journal Activity- Have the students spin a number and record the number in their journal. Have the students draw a picture of that number of objects in their journal.

Materials

- Fish Pattern
- Cardstock
- Fishing Pole
- String
- Magnet
- Small Magnetic Strips
- Tub
- Number Recording Sheet
- Math Journals
- Writing Utensils



Center 4: Fishing for Numbers

Part One:

1. Copy the Fish Pattern onto cardstock and write numbers from 0-10 on the fish.
2. Copy the Fish Pattern onto cardstock and make dots to match the numbers from 0-10.
3. Cut and laminate the fish.
4. Place a small magnetic strip on the back of each fish.
5. Decorate a tub to look like water.
6. Place the fish in the tub.
7. Make a fishing pole with a dowel, string, and a magnet.
8. Have the students take turns catching a fish.
9. Match the numbered fish with the fish with dots.

10. **Journal Activity:** Have the students catch fish from the tub. The students will then draw a fish and record the number that was on the fish in their journals. Have the students draw small circles to represent that number so that they look like bubbles coming from the fish. Students could write the numbers in the bubbles from 0 to the number that was caught.

Part Two:

Have the students put the fish that are caught in numerical order from 0-10, 0-20, 0-30.

Part Three:

Have the students record the number on the fish on a *Number Recording Sheet*.

Center 5: Ten Frame Counting

Part One:

1. Give each student a small container of counters.
2. The student spins the spinner.
3. On the Ten Frame card, the student places the same number of counters indicated on the spinner.

Part Two:

Students will record their spin on the Ten Frame recording sheet.

Part Three: Part of the Whole

1. Give each student a small container of counters and several ten frame cards with 5 spaces filled in.
2. The student spins the spinner that is numbered from 6 to 10.
3. The student fills in the missing part to make the number whole (e.g., if the student spins seven then they will need to put 2 counters on the *Ten Frame* card to make the number 7).
4. Students record their spin on the *Ten Frame- Part of the Whole* recording sheet.
5. This process can continue with numbers up to twenty and thirty. A spinner will need to be made for higher numbers, and recording sheets are available at www.coreacademy.usu.edu.

Materials

- Counters
- Ten Frame
- Ten Frame Recording Sheet
- Ten Frame- Part of the Whole
- Spinner



Assessment Suggestions

- The math journal is an excellent way for you to evaluate a student's mathematical thinking.

- Observations: These can be recorded on small sticky notes or on an Observation Sheet. Make notes about students that need to be pulled into a small group for extra help.
- Ask probing questions to focus students' thinking when using manipulatives.
- Have students share their thinking about the activity.
- Collect any recording sheets. This will give you time to make an in-depth assessment of a student's number sense.

Curriculum Extensions/Adaptations/Integration

- All students can use centers. Adaptations in quantity of numbers can be adjusted to meet the specific needs of each student.
- Center activities should be taught to the whole group and then placed in a center for students to practice and become proficient in the subject matter.
- Numbers should be talked about in all curriculum areas (e.g., How many pages are in this book? or How many seasons are in a year?).

Family Connections

- Number Writing Sheets 0-30 could be sent home for writing practice.
- Number Book 0-30 could be sent home for number representation and writing practice.
- Math Night – Parents would be invited to make the math activities for their homes.

Additional Resources

Books

Number Books from 0-10

10 for Dinner, by Jo Ellen Bogart; ISBN 0-590-71949-1

A-Counting We Will Go, by Rozanne Lanczak Williams; ISBN 0-916119-93-9

Anno's Counting Book, by Mitsumasa Anno; ISBN 0690012888

Bat Jamboree, by Kathi Appelt; ISBN 0-590-76767-4

City By Numbers, by Stephen T. Johnson; ISBN 0-14-056636-8

Count and See, by Tana Hoban; ISBN 0-02-744800-2
Count!, by Denise Fleming; ISBN 0-8050-4252-0
Emeka's Gift, by Ifeoma Onyefulu; ISBN 0-14-056500-0
Feast for 10, by Cathryn Falwell; ISBN 0395620376
How Many?, by Judy Nayer; ISBN 1-56784-307-7 (Big Book)
Moja Means One, by Muriel Feelings; ISBN 0-14-054662-6
More Than One, by Miriam Schlein; ISBN 0-590-10734-8
One, Two, Skip A Few! First Number Rhymes, Illustrated by Roberta Arenson; ISBN 0-439-22786-0
Ten Black Dots, by Donald Crews; ISBN 0-688-13574-9
Ten Cats Have Hats, by Jean Marzollo; ISBN 0-590-47056-6
Ten Little Rabbits, by Virginia Grossman and Sylvia Long; ISBN 0-8118-1057-7
The Gummy Candy Counting Book, by Amy and Richard Hutchings; ISBN 0-590-34127-8
The Icky Bug Counting Book, by Jerry Pallotta; ISBN 0881066907
Who's Counting?, by Nancy Tafuri; ISBN 0-590-48904-

Number Books from 0-20

Bears At The Beach, by Niki Yektai; ISBN 0-7613-0047-3
Cat Up A Tree, by John and Ann Hassett; ISBN 0-395-88415-2
Count and See, by Tana Hoban; ISBN 0-02-744800-2
Counting Is For The Birds, by Frank Mazzola Jr.; ISBN 0-88106-951-5
Counting Our Way to Maine, by Maggie Smith; ISBN 0-531-06884-6
Dragon Naps, by Lynne Bertrand; ISBN 0-670-85403-4
How Many? How Much?, by Rosemary Wells; ISBN 0-329-23384-X
Math Counts Counting, by Henry Pluckrose; ISBN 0-516-05452-X
Monster Munchies, by Laura Numeroff; ISBN 0-679-99163-8
One Woolly Wombat, by Rod Trinca and Kerry Argent
The Handmade Counting Book, by Laura Rankin; ISBN 0-8037-2309-1

Media

Math Circus, by Leap Frog (www.leapfrog.com); ISBN 0-7907-9948-0
Winnie the Pooh 123's, by Disney Learning Adventures; ISBN 0-788-4998-0

Web sites

<http://coreacademy.usu.edu> (Participant Handbook and Materials Kindergarten 2008 and 2007)
<http://illuminations.nctm.org> (Math Lesson Plans)
<http://kidscount1234.com>
http://lessonplanz.com/Lesson_Plans/Mathematics/Grades_K-2/index.shtml
<http://mrspohlmeyerskinderpage.com/mathsense.htm>
<http://www.alfy.com> (On-line Math Games)
<http://www.drmmaggieallen.net>
<http://www.funbrain.com>

<http://www.kellyskindergarten.com/math/mathactivities>

http://www.kidport.com/GradeK/Math/NumberSense/MathK_Sequence.htm (On-line Math Games)

<http://www.kidport.com/GradeK/Math/NumberSense/MathKNumbers.htm> (On-line Math Games)

<http://www.littlegiraffes.com>

<http://www.mathsolutions.com>

<http://www.mrsjonesroom.com/song/teenchant/html> (Tricky Teen Chant)

<http://www.theteacherscorner.net/lesson-plans/math/numbersense/index.htm>

<http://www.toddervillage.net>

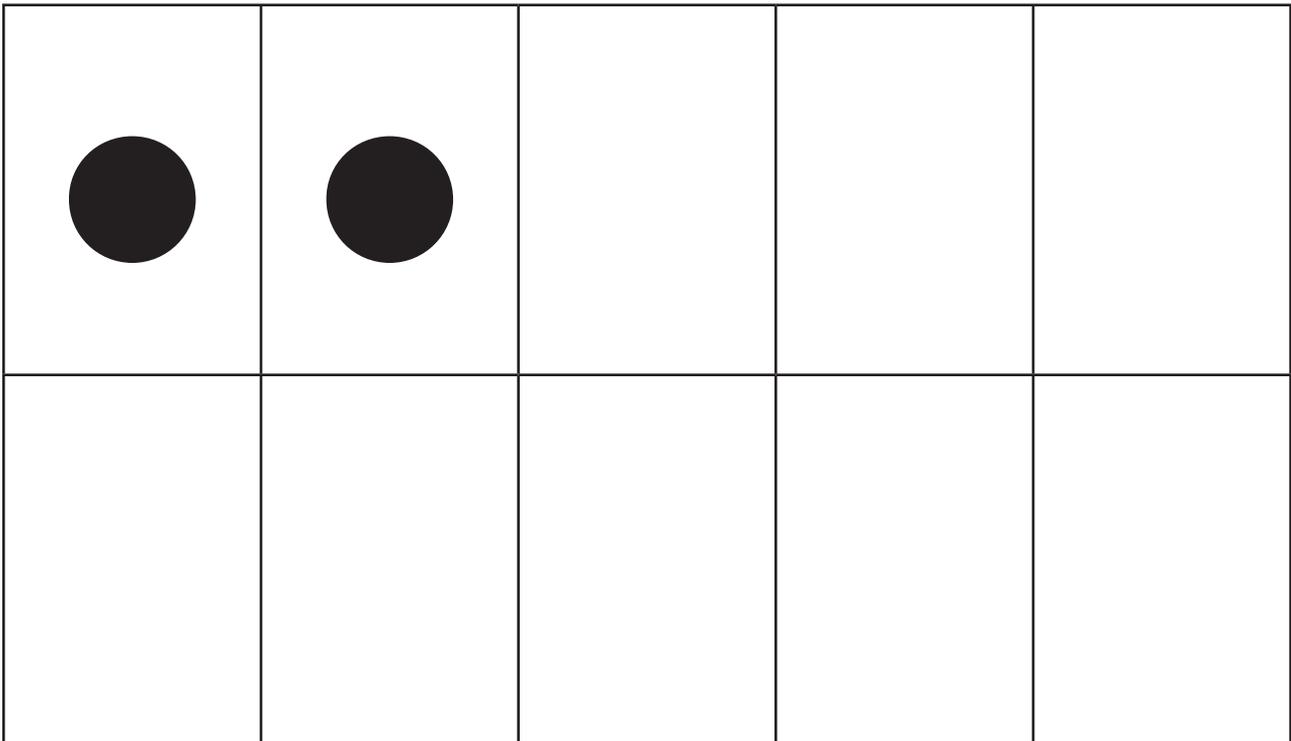
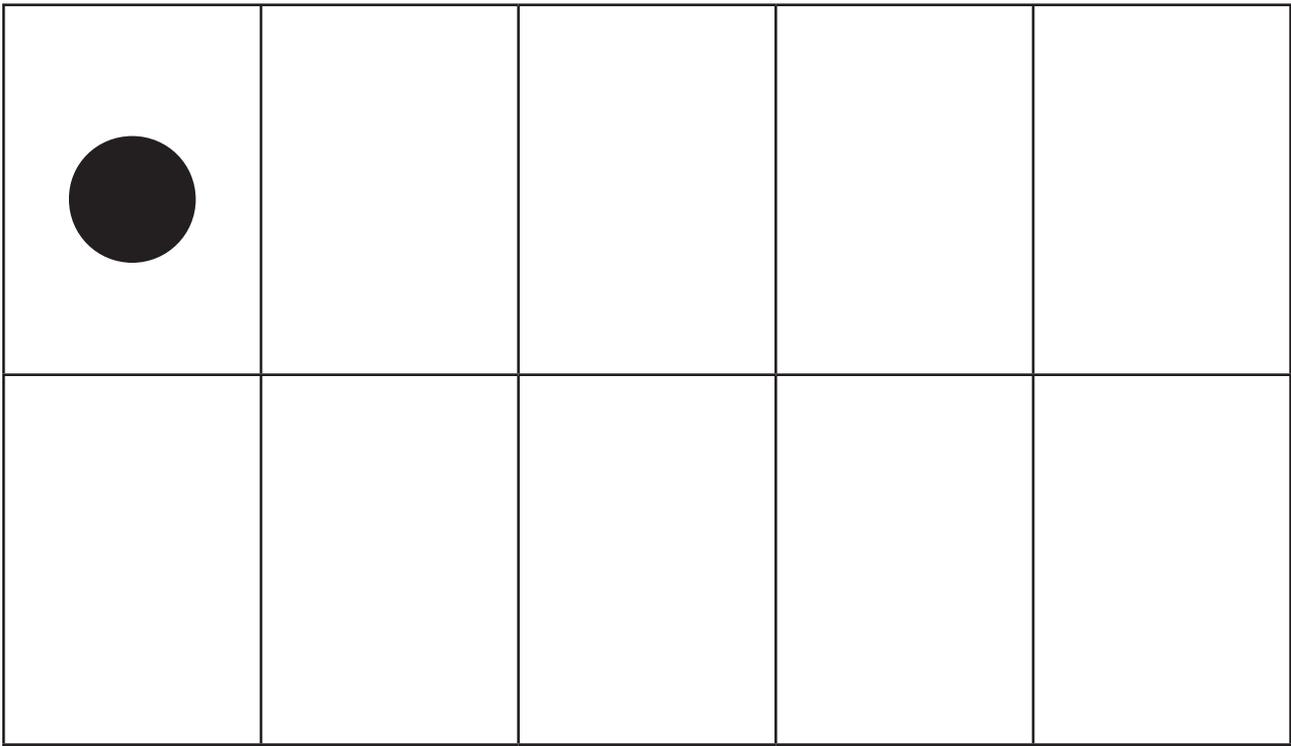
Organizations

National Council of Teachers of Mathematics, 1906 Association Drive, Reston, VA 20191-1502 (703) 620-9840, <http://www.nctm.org>

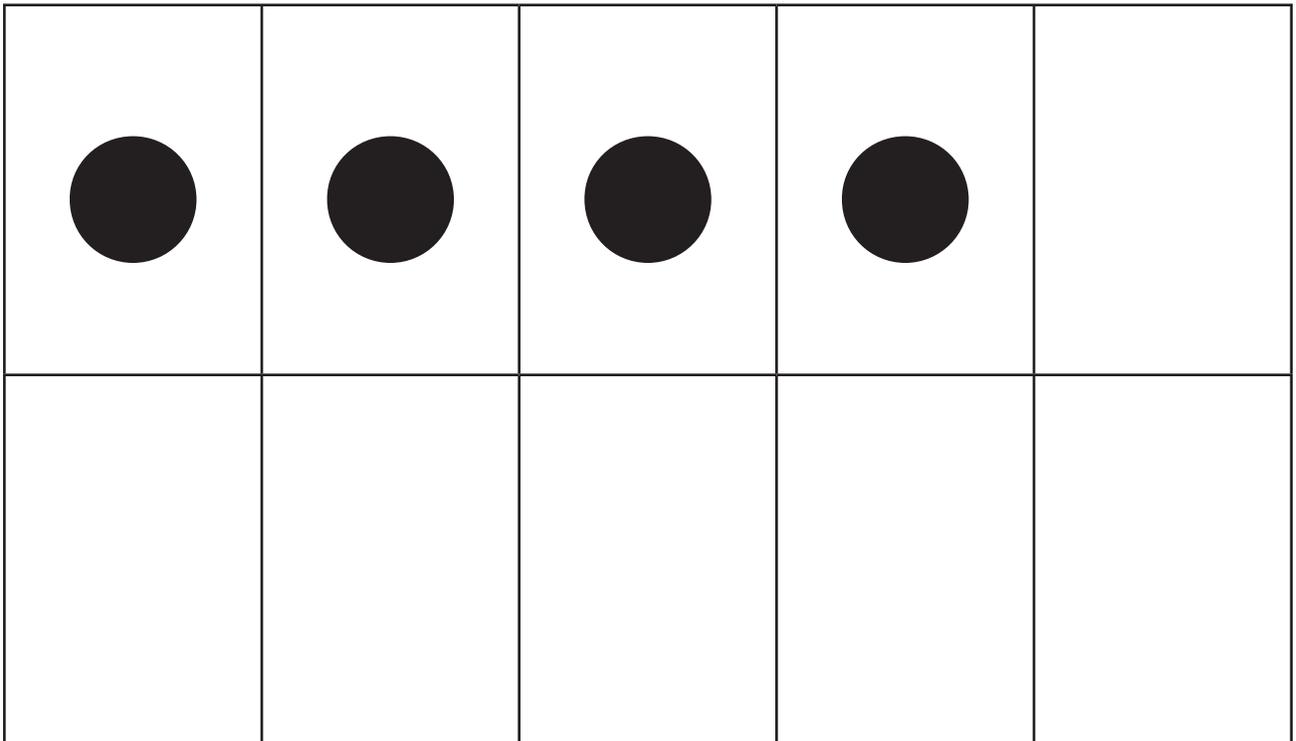
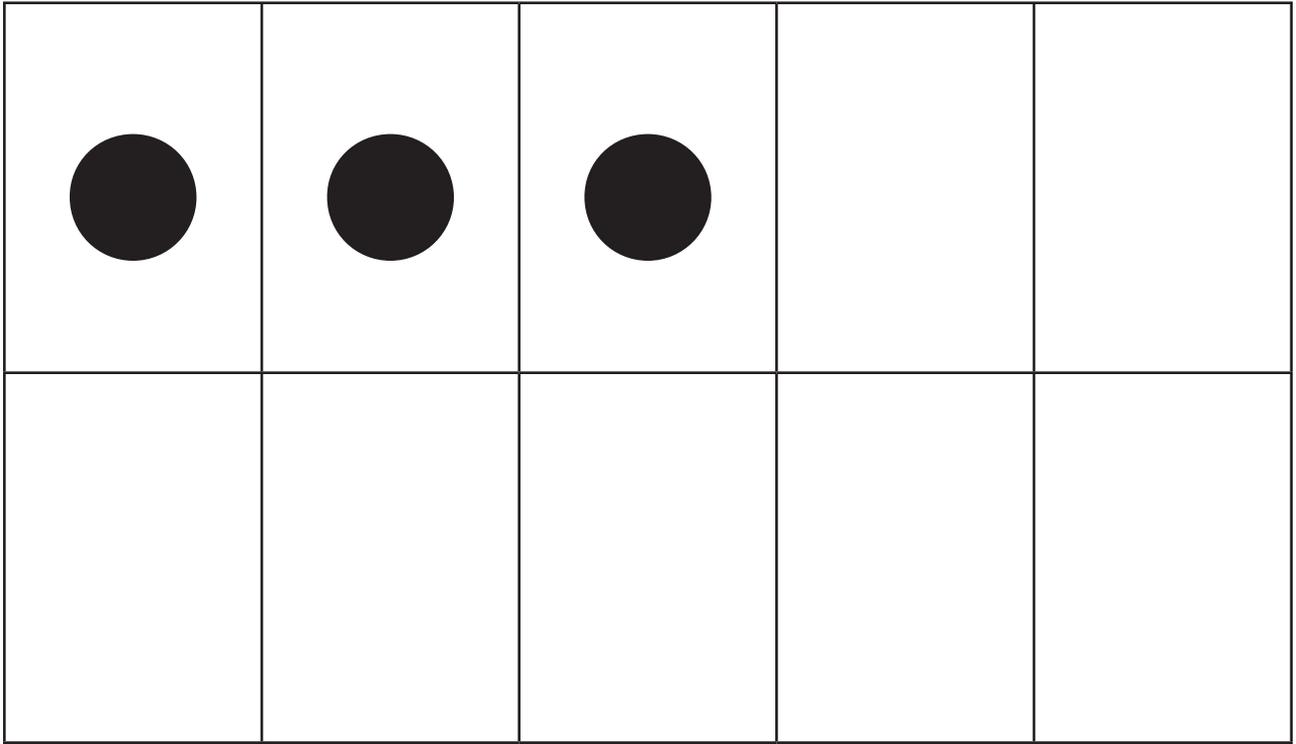
National Association for the Education Of Young Children, 1509 16th St. N.W., Washington, DC 20036 (202) 232-8777 or (800) 424-2460, <http://naeyc.org>

Blank Ten Frame

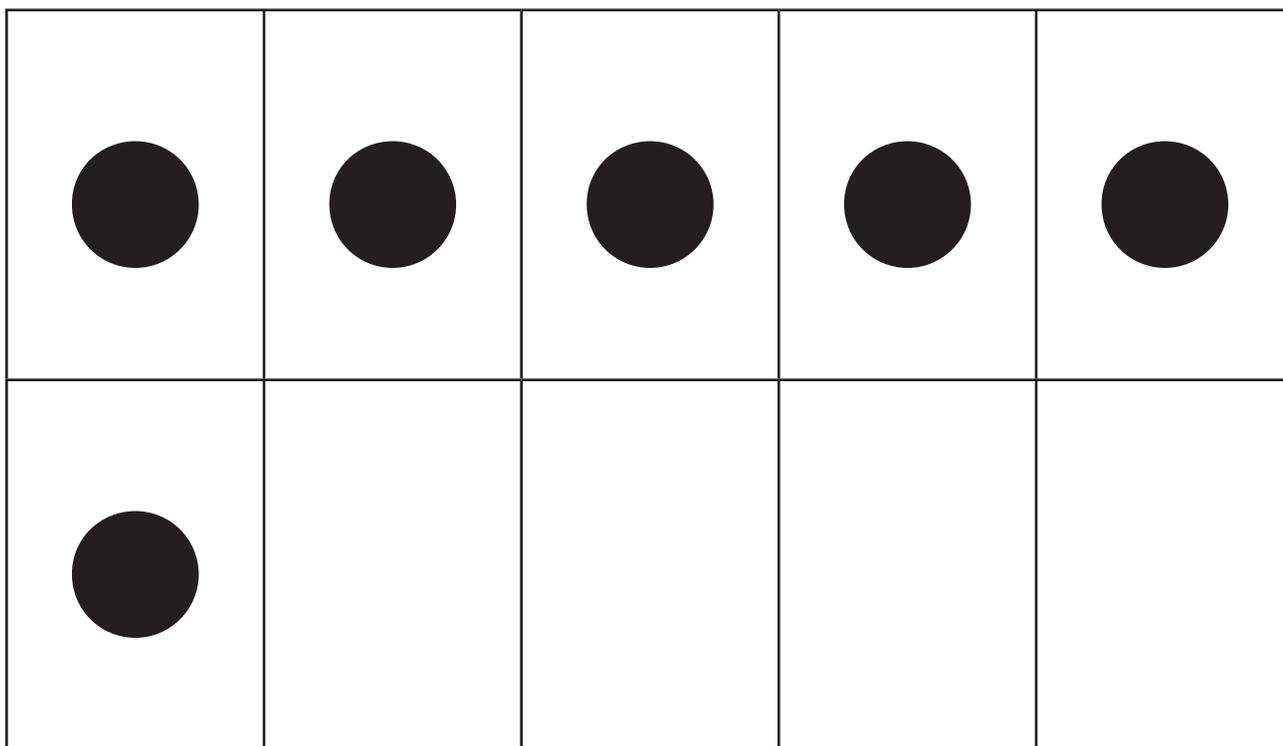
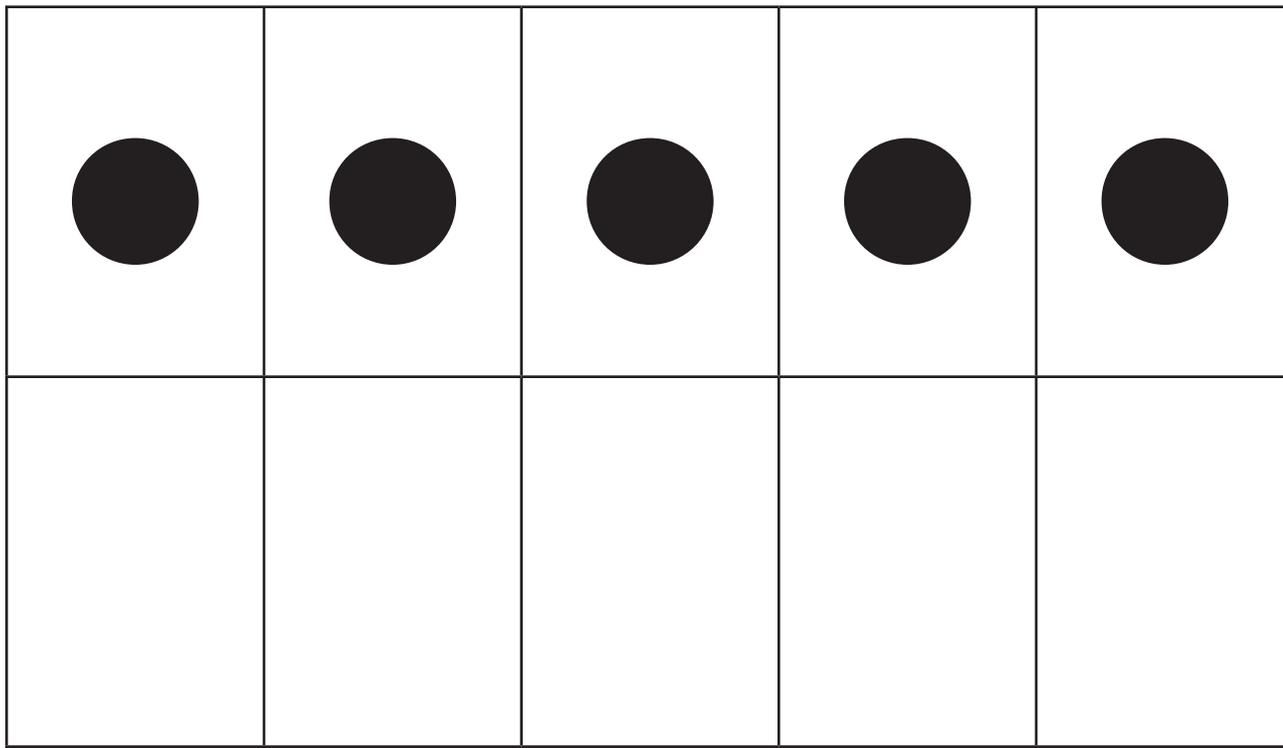
Ten Frame Cards



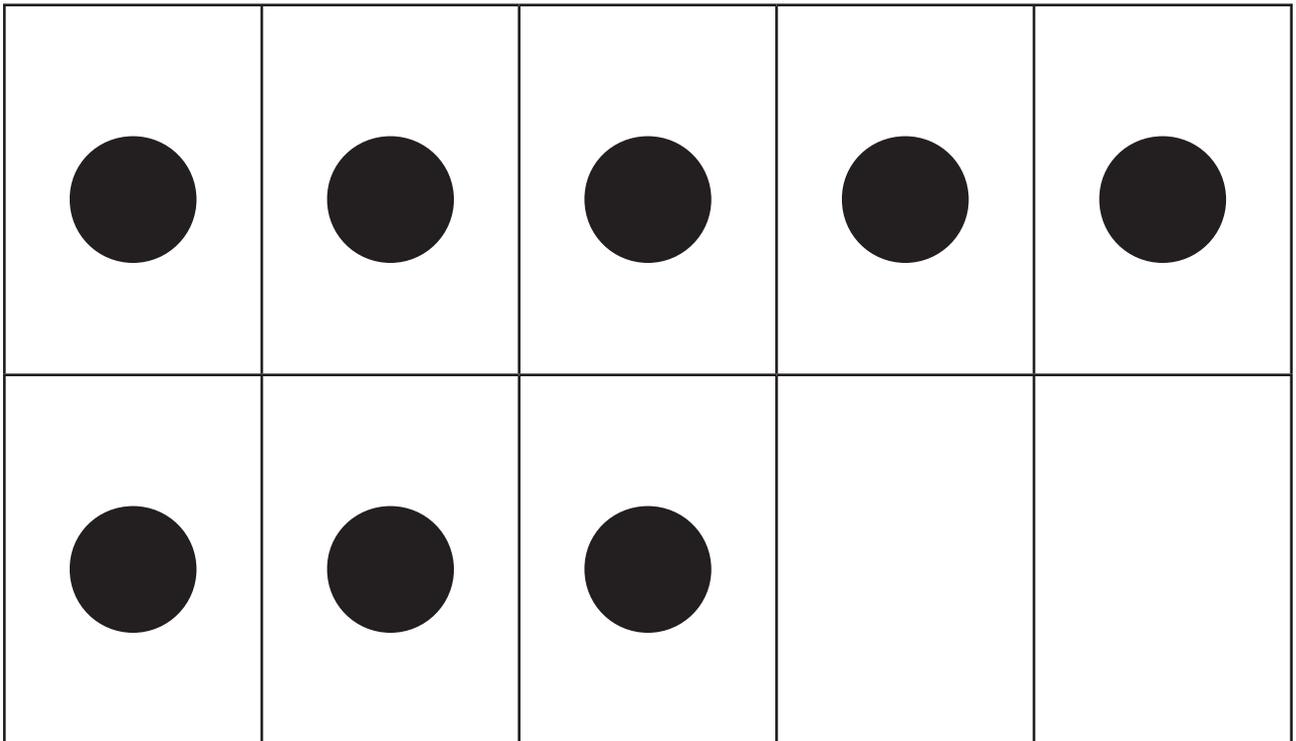
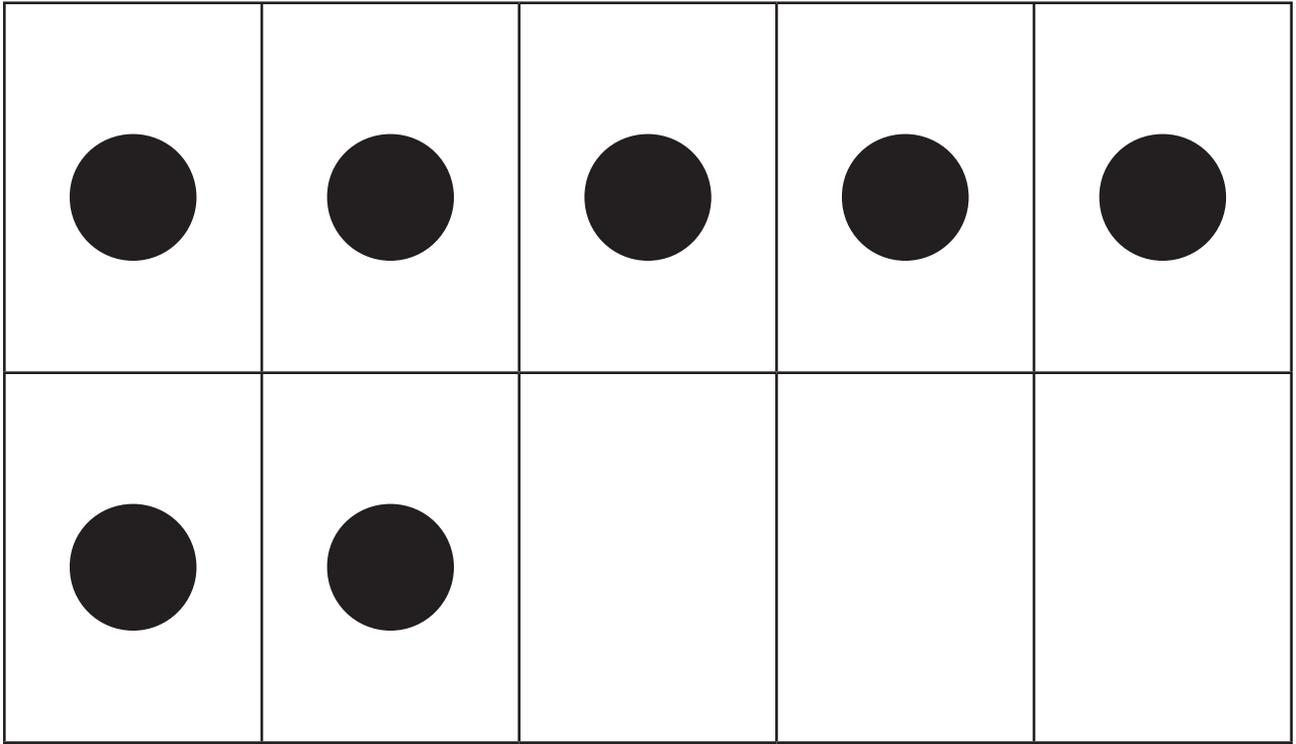
Ten Frame Cards



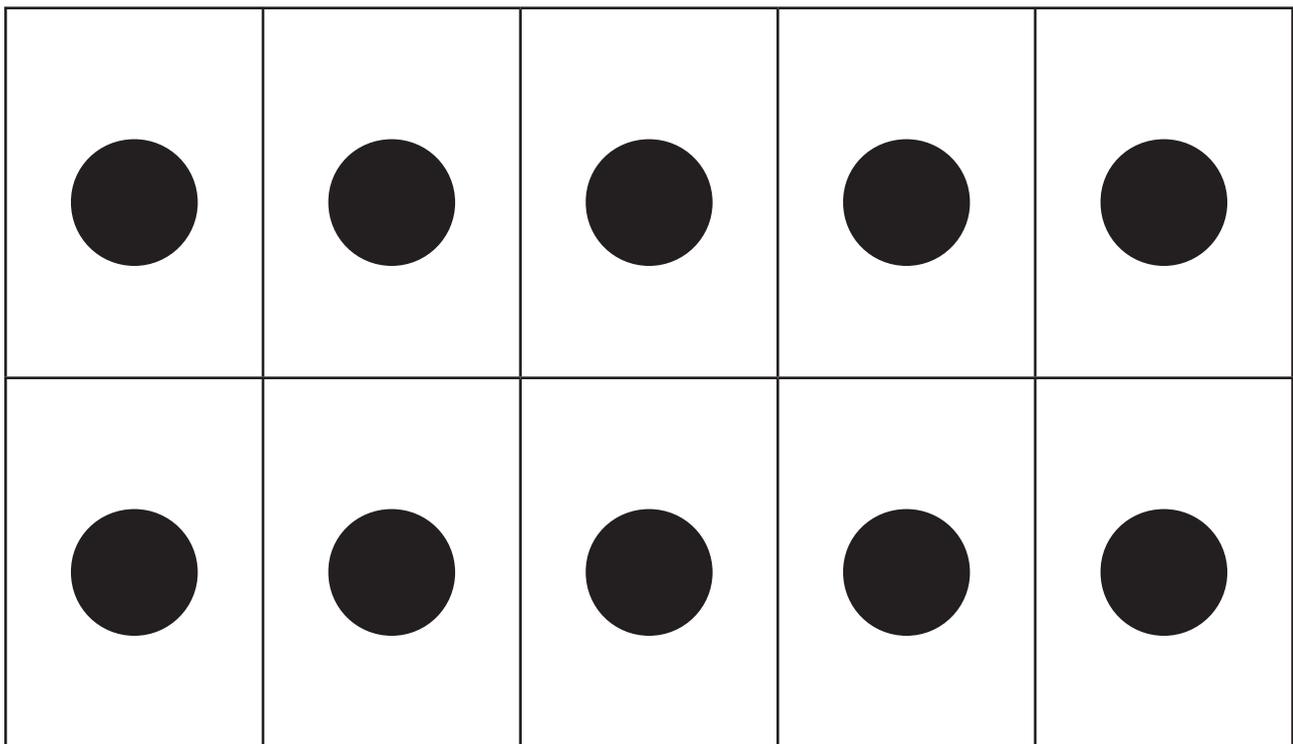
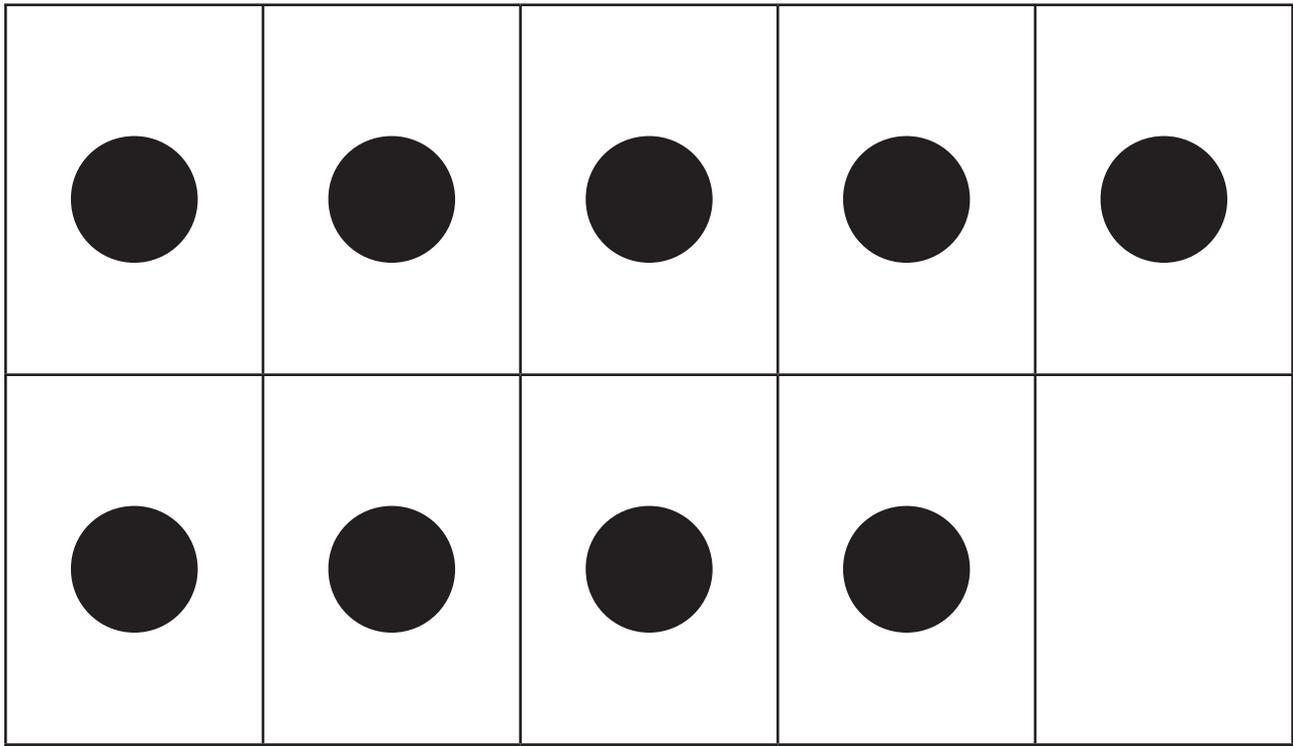
Ten Frame Cards



Ten Frame Cards



Ten Frame Cards



Number Stamp

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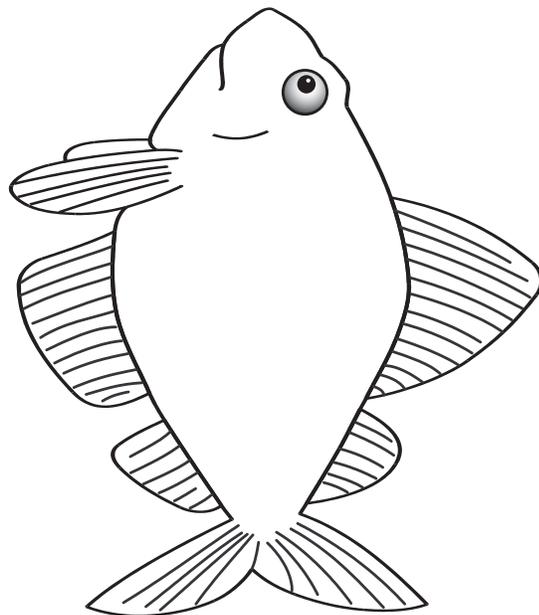
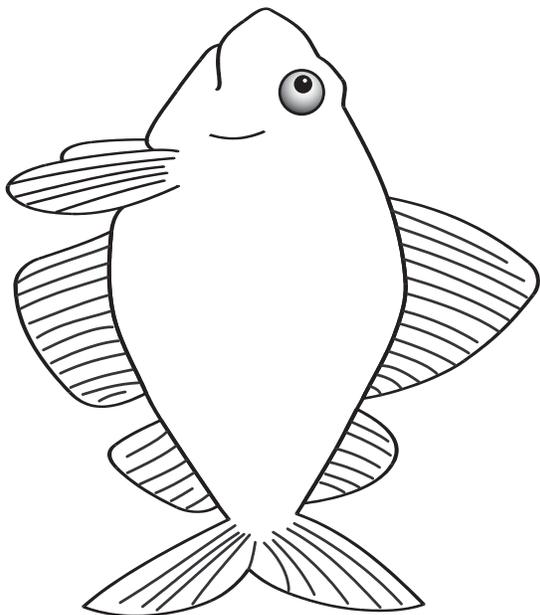
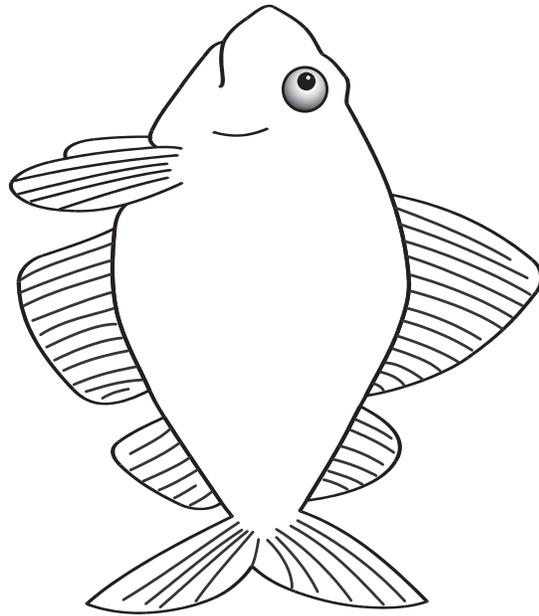
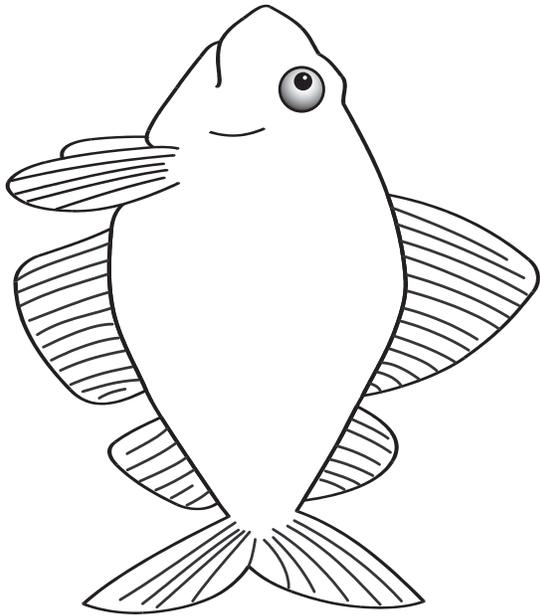
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Numbered Bead Cards

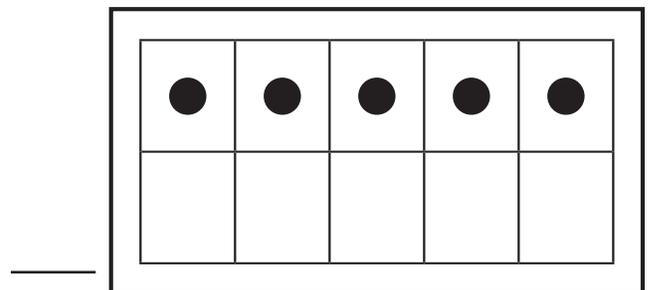
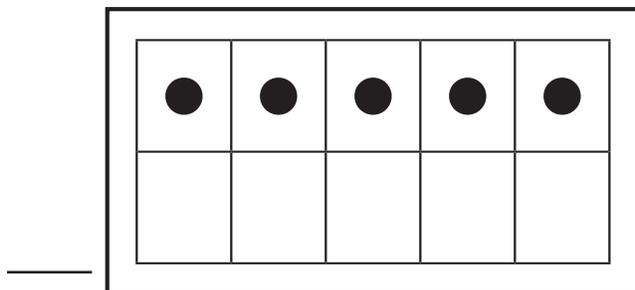
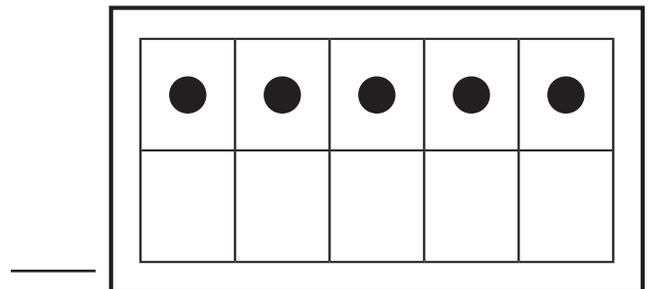
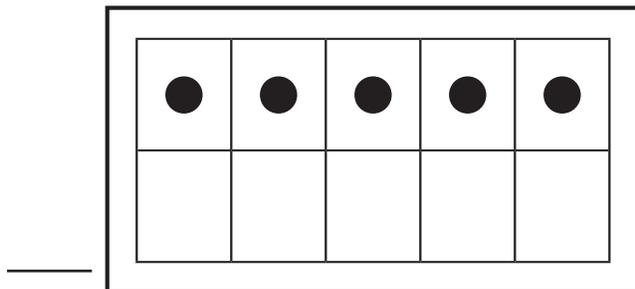
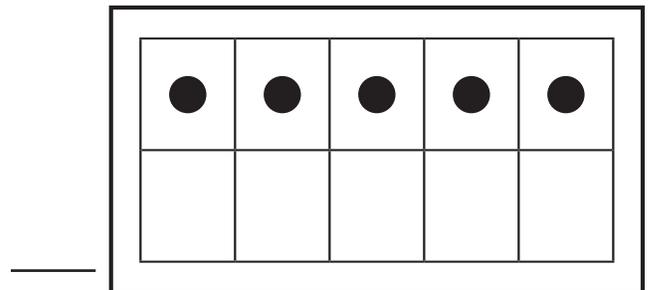
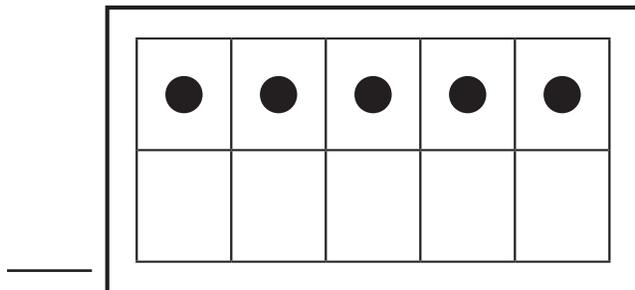
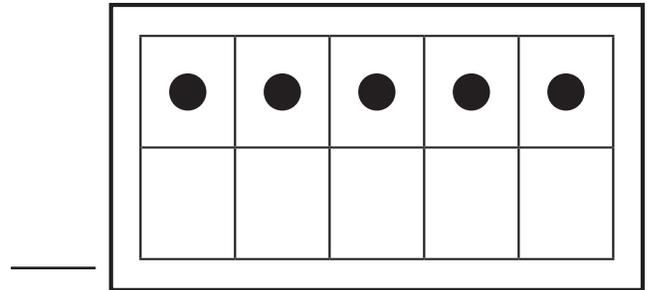
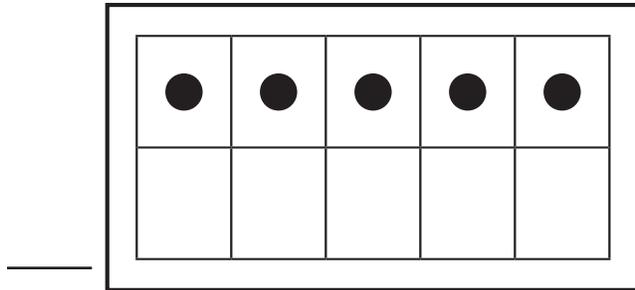
10	3
8	9
7	5
4	2

Fish Pattern

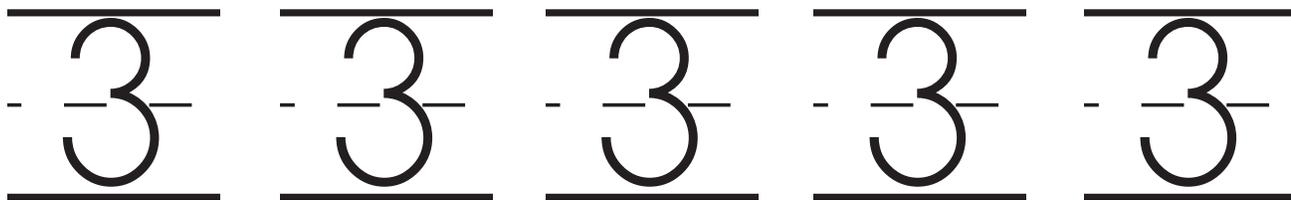


Ten Frame Recording Sheet

Ten Frame - Part of Whole



Number Writing



Three

Math 1-3

Activities

Joining & Separating

Double those Ducks!

Standard I:

Students will understand simple number concepts and relationships.

Objective 3:

Model, describe, and illustrate meanings of addition and subtraction for whole numbers less than ten.

Intended Learning Outcomes:

1. Demonstrate a positive learning attitude.
5. Understand and use basic concepts and skills.
6. Communicate clearly in oral, artistic, written, and nonverbal form.

Content Connections:

Math I-3; Joining and separating sets
 Language Arts I-1; Effective communication
 Language Arts VIII-5; Legible handwriting

*Math
 Standard
 I*

*Objective
 3*

Connections

Background Information

Addition, or joining of sets, is a basic concept most children know instinctively. Yet, as they make the transition from completely concrete to symbolic, some students become confused. Other students may be able to do symbolic addition without understanding that numerals represent real numbers and objects. To help them begin this transition, the use of manipulatives, later coupled with numerals, is an essential step to complete understanding. The ability to create their own math stories also helps them connect addition with the real world.

Kindergarten teachers need to provide repeated, varied activities for practice in joining sets. As students continue to practice, incorporating their own stories for each problem, as well as using numbers to describe the stories, they will make the connection between the real world and the symbolic.

Research Basis

Moyer, P. S. (2001). Are We Having Fun Yet? How Teachers Use Manipulatives to Teach Mathematics. *Educational Studies in Mathematics*. 47 (2) 175-197.

Manipulatives may serve as tools for teachers to translate abstractions into a form that enables learners to relate new knowledge to existing knowledge. This requires teachers to guide students to translate between representation in the form of mathematical objects, actions, and abstract concepts so that students can see the relationship between their knowledge and new knowledge.

Murray, A. (2001). Ideas on Manipulative Math for Young Children. *Young Children*. 56 (4) 28-29.

“Math is tangible. Children learn better when they’re using their senses; therefore, they should complete math tasks using three-dimensional objects to represent the numbers under examination.” The use of manipulatives involves multiple senses and increases the probability that each learner will make the necessary connections between the abstract and concrete in joining of sets.

Invitation to Learn

Gather the children and ask, “Do any of you have pets?” “How do you take care of your pets?” “What things do you need to take care of your pets?” Tell the students that you will be reading a story about a boy who had four ducks for pets, how he took care of their needs, and what happened when the ducks made some new friends.

Instructional Procedures

Materials

- Double the Ducks Cutouts*
- Double the Ducks*



Double the Ducks

1. Read *Double the Ducks* to the class. As you read, discuss the problems the boy faces.
2. Using the *Double the Ducks* cutouts on the board, have the students retell the story.
3. After retelling, regroup the cutouts into individual math problems and write corresponding numbers on the board.

NOTE: All of the following activities can be done on three levels.

1. **Concrete:** where the activity is done with manipulatives only.
2. **Pictorially:** where students draw to record what they have done with the manipulatives.
3. **Symbolic:** where they add numbers to their concrete or pictorial representations.

Materials

- Duck Storyboards*
- Duck manipulatives
- Paper strips
- 1 set of duck story boards per student
- Pencil



Duck Story Boards

1. Give each student a set of *Duck Storyboards* and 10 manipulatives.
2. Demonstrate and tell an addition story on your storyboard.
3. The students will tell addition stories on their storyboards using manipulatives.

- On subsequent days, the students will tell addition stories on their boards, then write the corresponding number sentence on the paper strips (2" x 8").

Doubled Duck Match

- Students place all cards face down.
- On each turn, a student will turn over two cards. If they have the same number of ducks, they keep the card. If they do not, they turn them back over. This continues until all of the duck cards have been matched.
- The students take each match, add the two cards together, and record on the *Doubled Duck Match Recording*.

Materials

- Duck match cards
- Doubled Duck Match Recording*
- Pencil



Double Up

- Make a stack or line with 1 to 5 manipulatives. Make another stack or line of the same size next to it.
- Add the two stacks or lines and record on the white board or chalkboard.

Materials

- Manipulatives
- Response boards
- Markers/chalk



Geoboard Doubles

- Demonstrate making one square on your geoboard. Instruct the students to also make one square. Then double the square to two squares. Continue doubling squares on the board with the students.
- Demonstrate filling in the *Geoboard Doubles Recording* as you double the squares.
- Students will now create their own doubles on the geoboard.
- Record what they did on the *Geoboard Doubles Recording*, filling in the numbers to make an equation.
- Continue the process for additional doubles.

Materials

- Geoboards
- Elastics
- Geoboard Doubles Recording*
- Pencil



Double Draw

- Students draw a Number Card from the container.
- They count out that number of manipulatives and write it on the paper.
- They double the number of manipulatives they drew out and write it, then add the two numbers.
- Continue the process until all the numbers have been drawn.

Materials

- Number cards*
- Manipulatives
- Paper
- Container
- Pencil



Materials

- Double Duck Ditty
- 20 ducks



Materials

- Journal – one journal idea per page



Materials

- Dot painter
- Art paper
- Pencil



Double Duck Ditty

1. Sing each verse of the song, adding the correct amount of ducks on the board as you sing.

Double Duck Journal

1. Give the students one journal page per day.
2. Students illustrate the journal entry.

Double Dot Addition

1. Students dot on the first section of the paper 1-5 dots and write the number below.
2. Students fold the paper over, duplicating (doubling) the dots, and write the number below.
3. On the third section, write the total.

Assessment Suggestions

- Journal pages are excellent assessments.
- Make observations of students during small group and individual activities.
- Recording sheets from individual and small group activities can be collected for assessment.
- As students work on the individual and small group activities, ask them to explain what they are doing and how they are deriving the answers.

Curriculum Extensions/Adaptations/Integration

- Advanced Learners: All these activities are designed for numbers 10 and below. Working with higher numbers will increase the challenge.
- Advanced Learners: Create their own journal ideas, solve, and illustrate.
- Special Needs Learners: Start with smaller numbers.
- Special Needs Learners: Work one on one with teacher on journal entries.
- Science Integration: Incorporate with study of birds, ducks, farm and domestic animals.

- Language Arts: Act out the story. Write stories about ducks and the story boards.

Family Connections

- With an adult's help, students can help prepare a simple recipe and double it for their family.
- Students can share their doubling stories with their families.

Additional Resources

Books

Double the Ducks, by Stuart J. Murphy; ISBN 0-06-028922-8

One of Each, by Mary Ann Hoberman; ISBN 0-590-51437-7

Domino Addition, by Lynette Long, Ph.D.; ISBN 0-88106-877-2

Jack the Builder, by Stuart J. Murphy; ISBN 0-06-055775-3

Quack and Count, by Keith Baker; ISBN 0-15-205025-6

Ten Little Rabbits, by Virginia Grossman and Sylvia Long; ISBN0-440-83653-0

Developing Number Concepts Addition and Subtraction, by Kathy Richardson; ISBN 0-7690-0059-2

Articles

7 Musts for Using Manipulatives, by Kathy Richardson; Instructor Magazine, April 1996

Tips on using Manipulatives, by Norman Labush; Didax Educational Resources, <http://www.didax.com>

“Concrete” Manipulatives, Concrete Ideas, by Douglas H. Clements; Didax Educational Resources, <http://www.didax.com> from previously published article in Contemporary Issues in Early Childhood, 1(1), 45-60

Early Childhood Mathematics: Promoting Good Beginnings, by the National Association for the Education of Young Children (NAEYC) and the National Council for Teachers of Mathematics (NCTM), 2002

Number Talks: Thinking with Numbers, by Kathy Richardson; Didax Educational Resources, <http://www.didax.com>

Web sites

<http://www.didax.com>

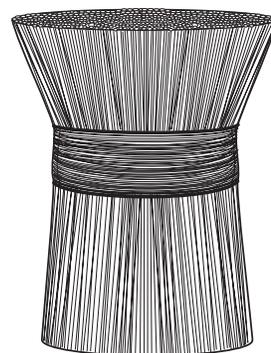
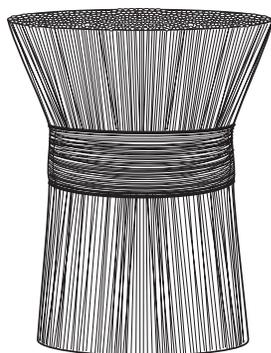
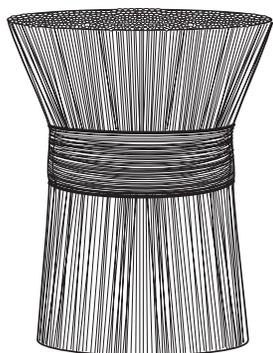
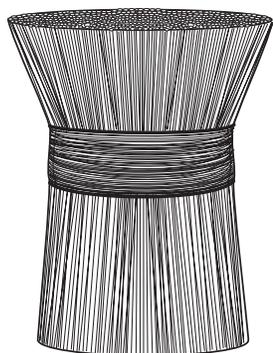
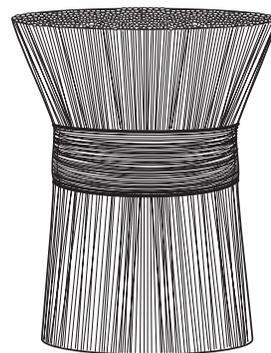
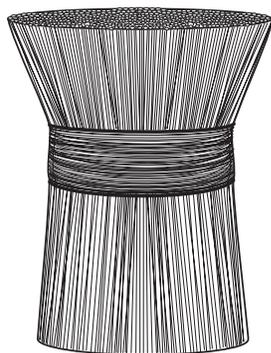
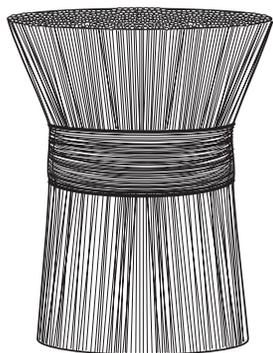
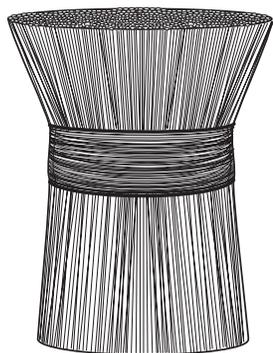
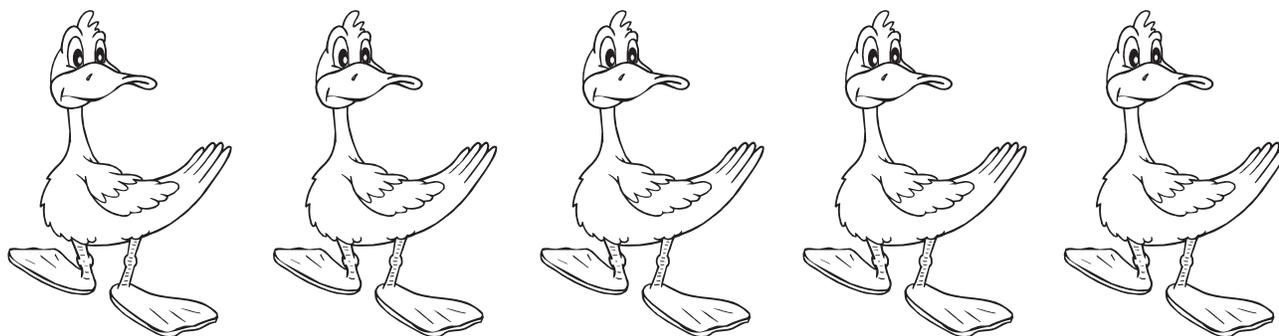
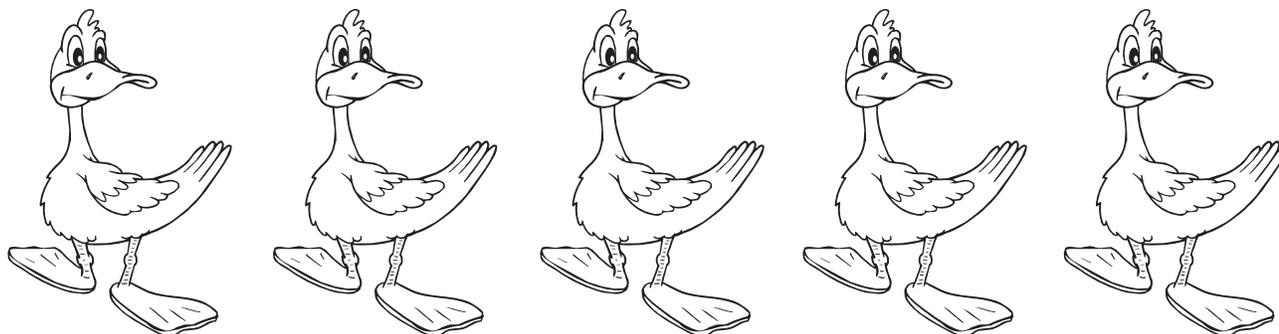
<http://www.illuminations.nctm.org>

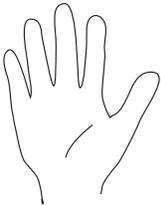
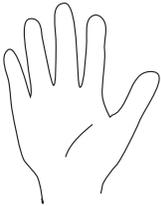
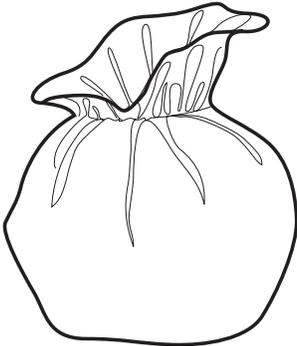
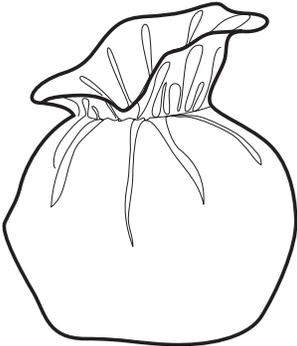
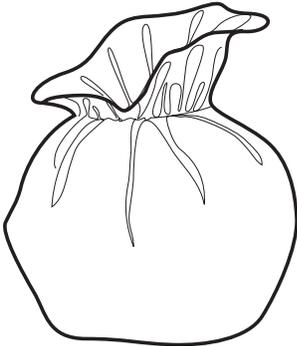
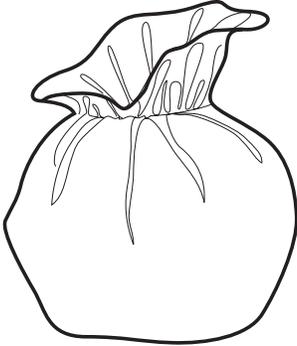
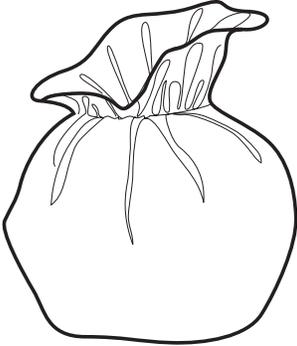
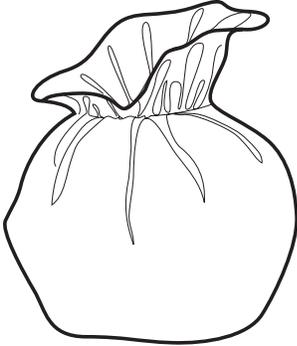
Organizations

National Council for Teachers of Mathematics, 1906 Association Drive, Reston VA 20191-1502 (703) 620-9840, <http://www.nctm.org>

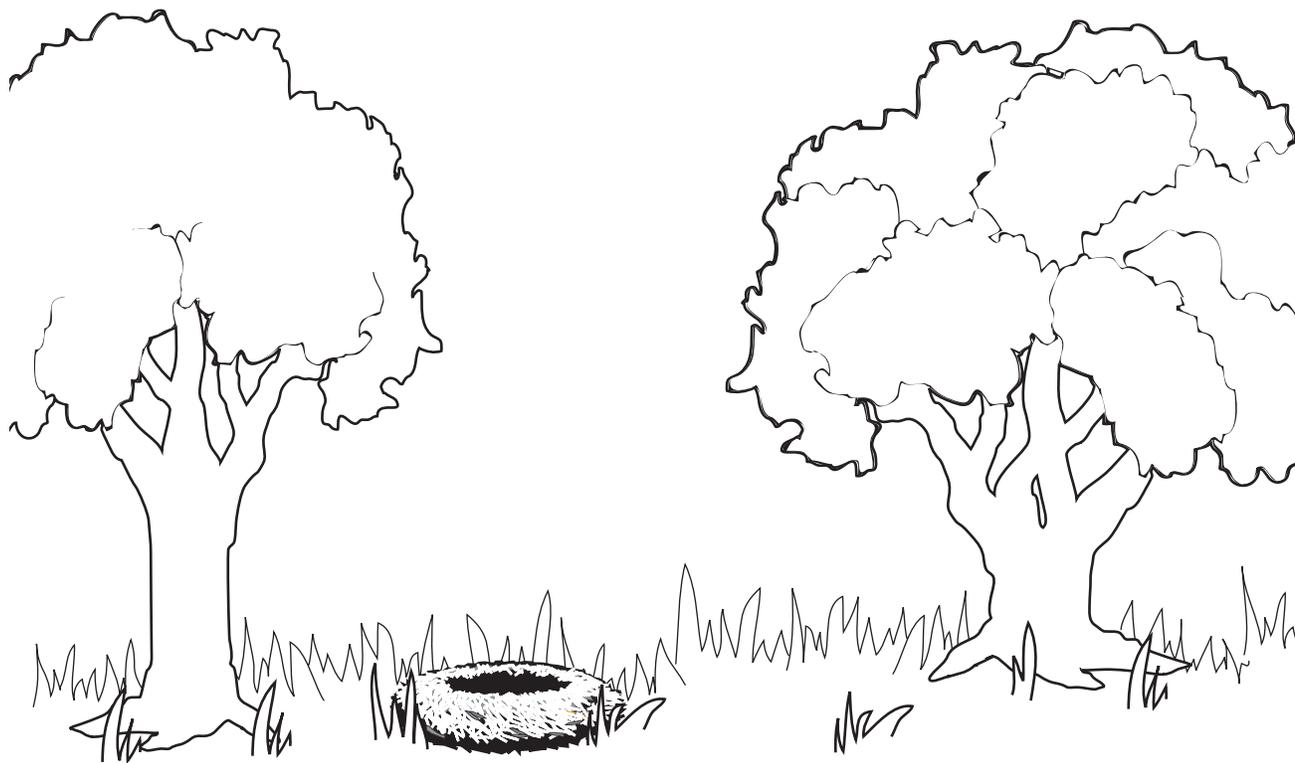
National Association for the Education of Young Children, 1509 16th Street N.W., Washington D.C. 20036 (202) 232-8777 or (800) 424-2460, <http://www.naeyc.org>

Double the Ducks Cutouts

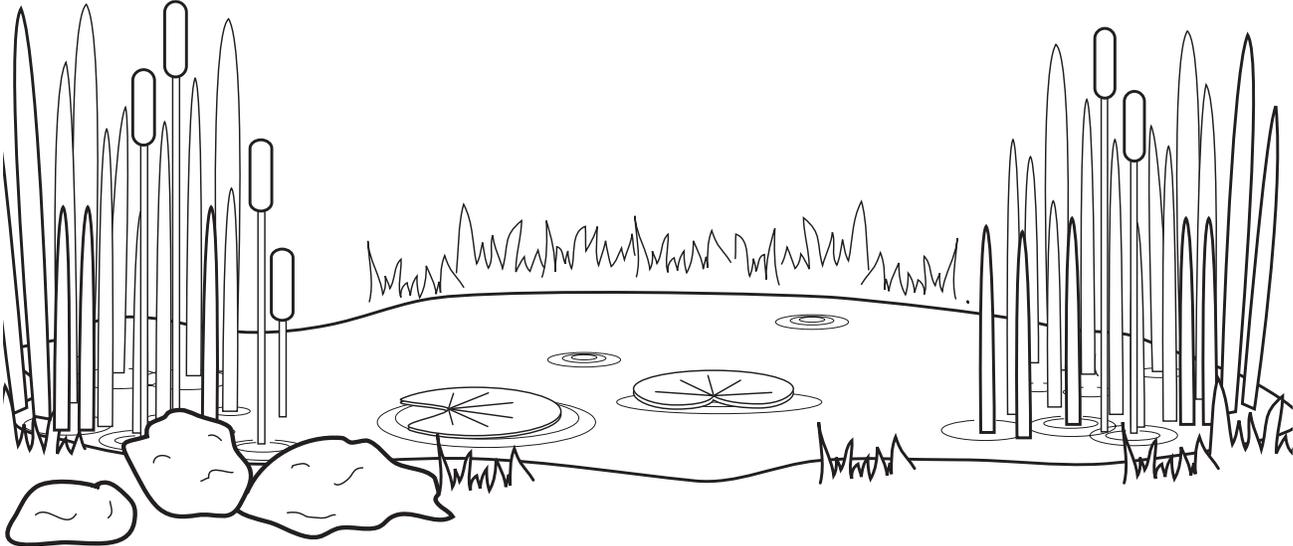




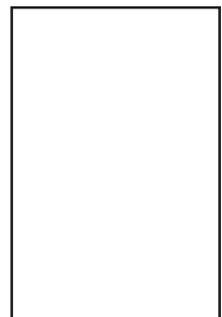
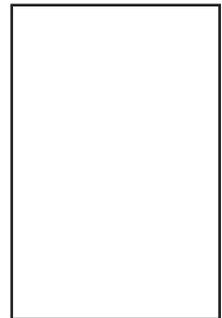
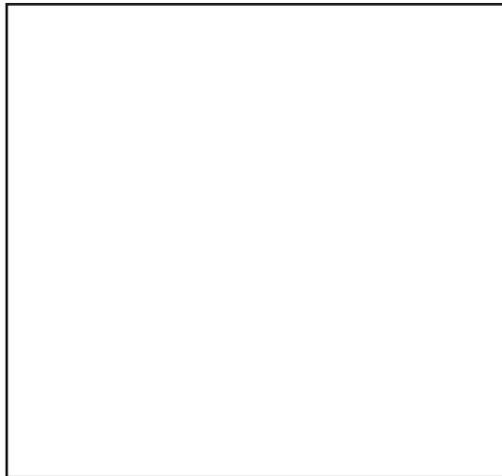
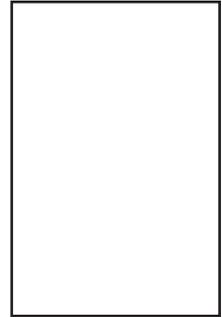
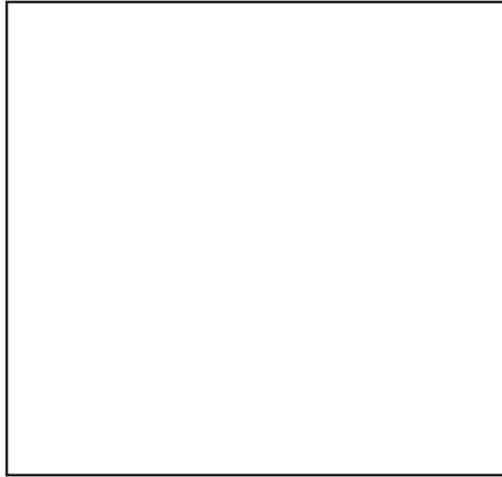
Duck Storyboard



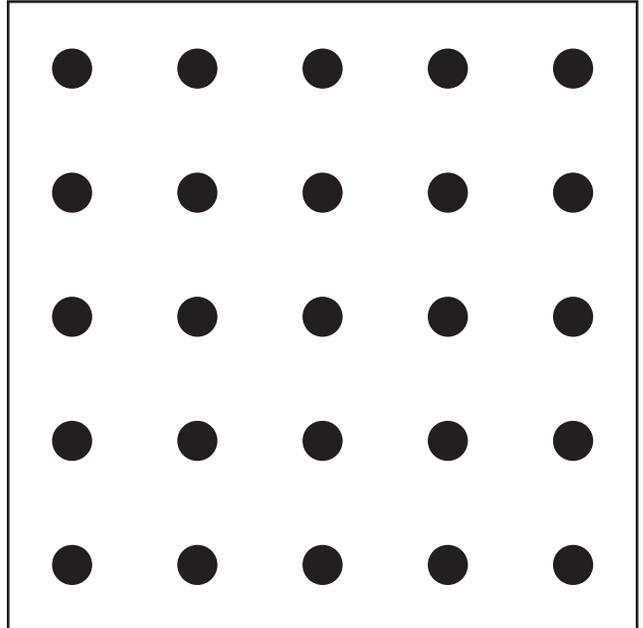
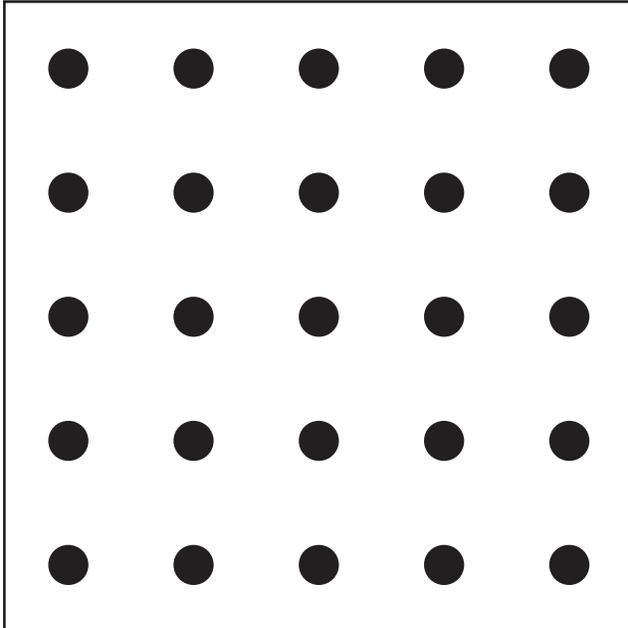
Duck Storyboard



Doubled Duck Match Recording

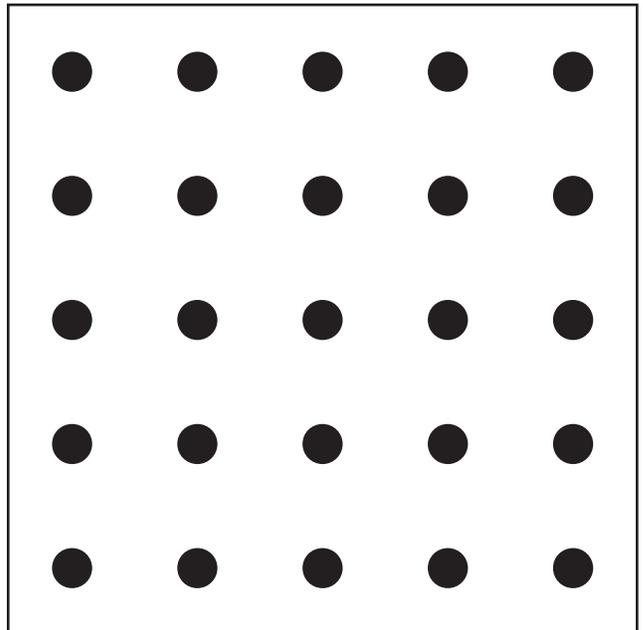
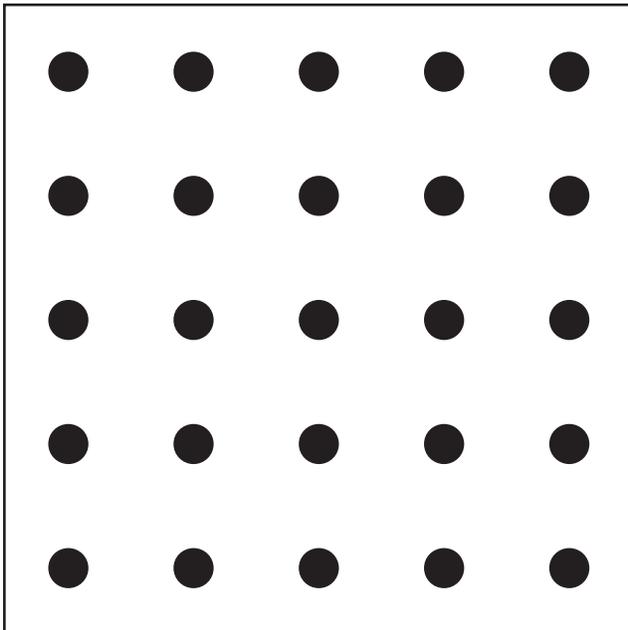


Geoboard Doubles Recording Sheet



$$\square + \square = \square$$

$$\square + \square = \square$$



$$\square + \square = \square$$

$$\square + \square = \square$$

Number Cards

0	1	2	3
4	5	6	7
8	9	10	

0	1	2	3
4	5	6	7
8	9	10	

Double Duck Ditty

(Sung to the tune of the Bunny Hop)

To the pond came one duck,
Then, another too.
Add them both together,
And you get 2.

6 small ducks were swimming.
6 more came to delve.
Add them all together,
And you get 12.

In the farm were 2 ducks.
Then there came 2 more.
Add them all together,
And you get 4.

7 duckies washing.
7 more did preen.
Add them all together,
You've got 14.

In the yard were 3 ducks.
Three more came for kicks.
Add them all together,
And you get 6.

8 ducks went out walking.
Saw 8 more on the green.
Add them all together,
You've got 16.

At the fence were 4 ducks.
4 more through the gate.
Add them all together,
And you get 8.

9 ducks were so hungry.
9 more looked so lean.
Add them all together,
You've got 18.

Five ducks eating dinner.
Five more came again.
Add them all together,
And you get 10.

10 ducks were dining
10 more ate plenty.
Add them all together,
You get 20.

Math Journal Problems

Print one at the top of each page for Kindergarten Math Journals.

1. Four ducks want to take a nap on their own pile of hay. If there are two piles of hay, how many more are needed so all the ducks can sleep on hay?
2. There are three ducks. Each duck has two ducklings. How many ducklings are there?
3. Five ducks are swimming in the pond. How many legs are swimming?
4. The farmer builds a house for every two ducks. How many houses will he need for ten ducks?
5. The farmer needs three sacks of food a day to feed his ducks. How many bags of food does the farmer need for three days?
6. The farmer has three friends come to help. How many hands are working?
7. Two ducks lay five eggs each. How many eggs are there?
8. The farmer is making peanut butter sandwiches for lunch for his three friends. Each sandwich has two slices of bread. How much bread does the farmer need?
9. Five ducks go flying. How many wings are flapping?
10. Two mother ducks go walking with eight ducklings. Each family has the same number of ducklings. How many ducklings in each family?

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Gulping Down Subtraction

Standard I:

Students will understand simple number concepts and relationships.

Objective 3:

Model, describe, and illustrate meanings of addition and subtraction for whole numbers less than ten.

Intended Learning Outcomes:

1. Demonstrate a positive learning attitude.
5. Understand and use basic concepts and skills.
6. Communicate clearly in oral, artistic, written, and nonverbal form.

Content Connections:

Math I-3; Separation of sets
Language Arts VIII-5; Legible numeral writing to communicate

Math
Standard
I

Objective
3

Connections

Background Information

Children learn mathematics through everyday experiences and language. When they tell stories about their own math problems, they make connections to their own life experiences and other knowledge.

Likewise, using literature to help students make connections between the real world and mathematics is a valuable tool for teachers. Literature can foster the growth of mathematical thinking through the problems presented in the stories. Problem solving strategies can be developed through mathematical discussion of literature. Talking about math through literature can help struggling students learn to communicate in the language of mathematics, a skill basic to future success in the subject.

As we use literature as a springboard for learning, questioning, and building curriculum, we build strong math learners who link a seemingly symbolic subject to the real world.

Research Basis

Moyer, P. S. (2000). Communicating mathematically: Children's literature as a natural connection. *The Reading Teacher*. 54 (3) 246-55.

Children's literature provides a context through which mathematical concepts, patterns, problem solving, and real-world contexts may be explored.

Opportunities for the development of mathematical ideas arise naturally from children's books. These daily connections are vital if children are to learn to speak and write the language of mathematics. Many children have difficulty communicating mathematically.

Teachers who promote mathematical discussion throughout the curriculum are developing key abilities in students that will serve them well in communicating mathematically throughout their lives.

Protheroe, Nancy (2004). *Motivating Reluctant Learners*. *Principal*. 84 (1) 46-48.

One of the most compelling strategies to motivate reluctant learners is to make learning relevant to their lives. By making connections between students' experiences and the curriculum, introducing new lessons and concepts with activities that draw on their experiences, and teaching subject matter so it is important to students will motivate the reluctant learner. Using engaging, well-written literature is one way to engage early childhood students in mathematics and help them make connections to their world and previous knowledge.

Invitation to Learn

Bring in a small bowl with hungry goldfish in it. Let the children talk about the fish. Sprinkle some fish food in the bowl and watch the fish gulp down their food. Tell the students you are going to read a story about some hungry fish who gulp down their food.

Instructional Procedures

Materials

- Ten Sly Piranhas Cutouts*
- Ten Sly Piranhas*
- Goldfish crackers



Ten Sly Piranhas

1. Read the Story *Ten Sly Piranhas*. Have the children help you with the repetitive verse.
2. Using the *Ten Sly Piranhas* cutouts (cut and colored, with a magnet on the back to be used on a whiteboard), have the children help you retell the story.
3. Write the number sentences as each problem in the story arises.
4. Give each child a bag of ten Goldfish crackers and have them eat one at a time as you reread the story.

NOTE: All of the following activities can be done on several levels.

1. Concrete, where objects are used.
2. Pictorially, where students draw to record what they have done.
3. Symbolically, where they use numbers along with their concrete or pictorial representations.

Ten Frame Subtraction

1. Students put a fish in each of the squares on the *Ten Frame*.
2. Students take a *Number Card* from the container and remove that many fish from the *Ten Frame*.
3. Students record their subtraction sentence on *Ten Frame Recording* paper.
4. Students repeat the procedure until they have filled in the *Ten Frame Recording* paper.

Materials

- Ten Frame
 - Fish counters
 - Number cards
 - Small container
 - Ten Frame Recording
 - Pencil
- 

Subtraction Toss

1. Each student puts a fish on the number ten on the *Fish Number Line*.
2. Students shake the cube and move backwards that amount on the *Fish Number Line*.
3. Students record the numbers on the recording master.
4. The first student to zero wins and the game begins again.
5. For more advanced students, make a *Fish Number Line* beginning with 20.

Materials

- Fish Number Line
 - Fish counters
 - Number cube
 - Fish Number Line Recording
 - Pencil
- 

Graphing Subtraction

1. Students take one fish at a time from the paper sack and place it in the appropriate column on the *Fish Graph*.
2. When one column is filled, students record the numbers, find the difference, and record it on the *Fish Graph Recording* sheet.
3. When the first graph is finished, students put the fish back in the sack and repeat until the recording sheet is filled.
4. If two students do the activity, they take turns pulling fish from the sack and both record.

Materials

- Fish Graph
 - Fish counters
 - Fish Graph Recording
 - Paper sack
- 

Fishy Subtraction Stories

1. Students tell a story with their fish counters for each of the Storyboards.
2. Students record their number story on the white board or chalkboard.

Materials

- Fish Story Boards
 - Fish counters
 - Response boards
 - Markers/chalk
- 

Fishy Journal Entries

1. Reproduce one journal entry at the top of each page.
2. Students solve and illustrate each entry.

Materials

- Fish journal stories
 - Markers/pencils
- 

Assessment Suggestions

- Collect and assess journal entries.
- Collect and assess recording sheets.
- Have students tell and explain fishy storyboard stories.
- Observe and take notes as children participate in each activity.

Curriculum Extensions/Adaptations/Integration

- These activities are for numbers ten and under. Advanced learners can do the same activities with numbers up to 30.
- For special needs learners, take the numbers down to the zero to five range. They should work with a teacher or adult in small groups or individually.
- Science: Integrate this activity with study on fish or food chains.

Family Connections

- Students can draw the story at school and retell at home.
- Send *Ten Sly Piranhas Practice Ideas* home with each child.

Additional Resources

Books

Ten Sly Piranhas: A Counting Tale in Reverse (A Tale of Wickedness—and Worse), by William Wise; ISBN 0-8037-1200-6.

Ten Little Fish, by Audrey Wood; ISBN 10:043963561

Splash, by Ann Jonas; ISBN – 10: 0-688-15284-8

Five Little Penguins Slipping on the Ice, by Steve Metzger; ISBN 0-439-46577X

Monster Math, by Anne Miranda; ISBN 0-439-20859

Elevator Magic, by Stuart J. Murphy; ISBN 0-06-446709-0

Seven Little Rabbits, by John Becker; ISBN 10:0802796346

Ten Wiggly Wiggly Caterpillars, by Debbie Tarbett; ISBN: 10:184506027X

Developing Number Concepts Addition and Subtraction, by Kathy Richardson; ISBN 0-7690-0059-2

Articles

Developing Math Games Based on Children's Literature, by Kay M. Cutler, Deanna Gilkerson, Sue Parrott, and Mary Teresa Bowne; NAEYC www.naeyc.org 2003

Selected Book Pairs for Linking Math and Literacy, by Phyllis Whitin and David J. Whitin;
Beyond the Journal, Young Children on the Web, March 2005

Learning Math through Stories, by Stuart J. Murphy; School Library Journal, March 1999
ISSN 0362-8930

Promoting Mathematical Explorations Through Children's Literature, by David J. Whitin and
Cassandra C. Gary; Arithmetic teacher, March 1994 ISSN 0004-136X

The "Wow" Factor, by Lisa Von Drasek; www.TeachingK-8.com January 2006

Using Children's Books to Teach Math, by Marilyn Burns; <http://www.didax.com> February
2005

Web sites

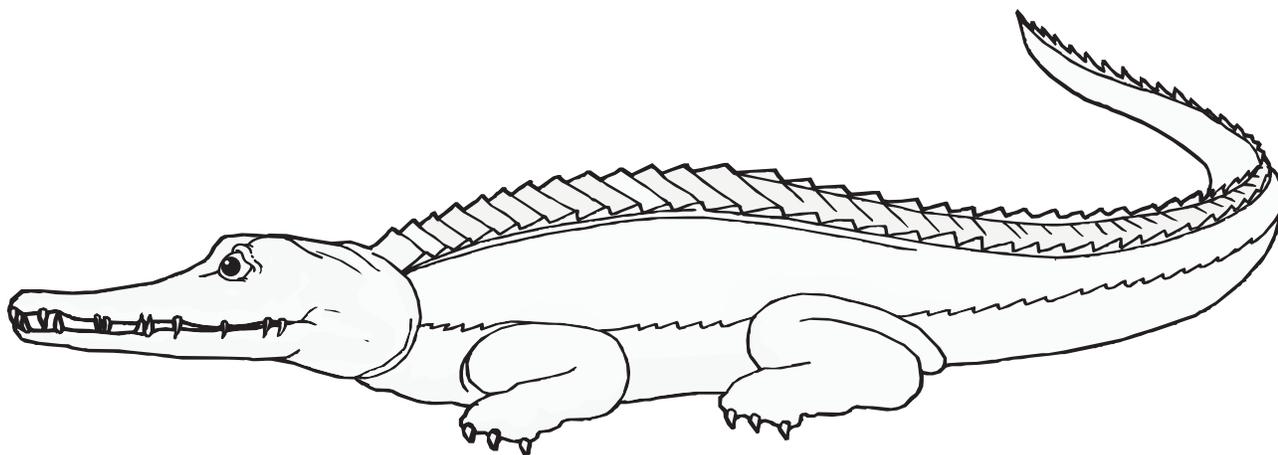
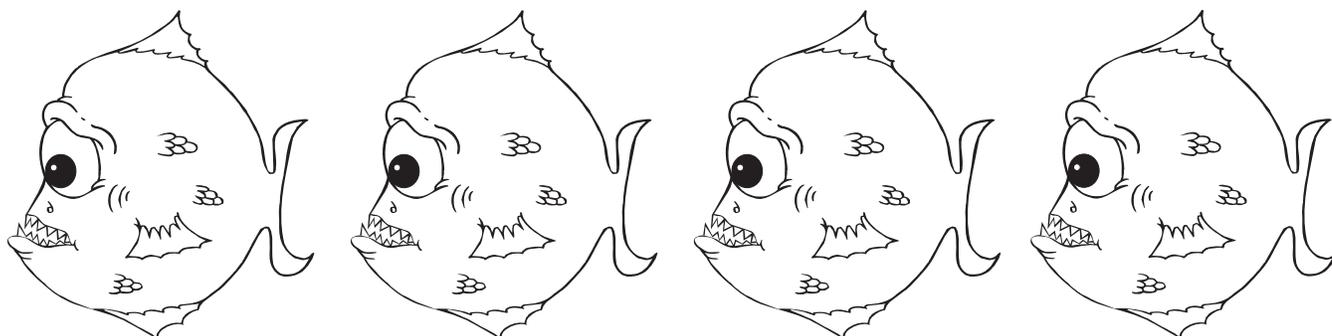
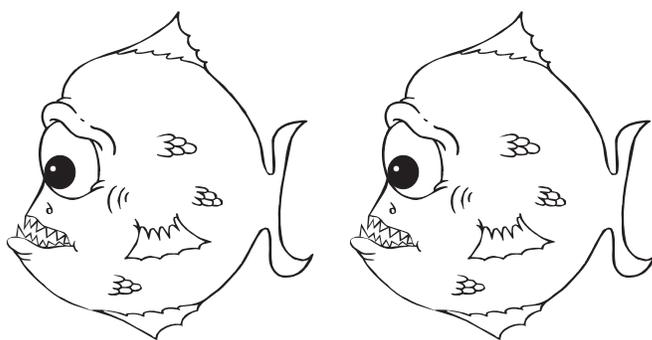
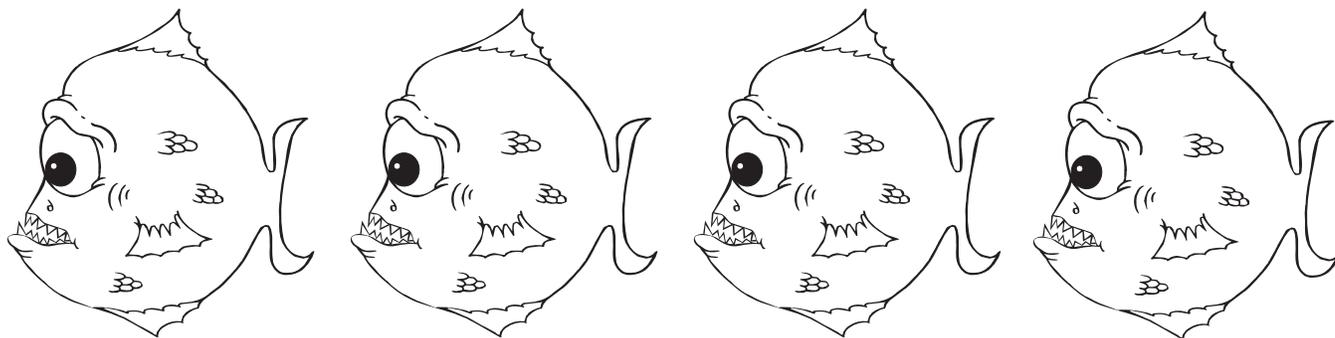
<http://www.didax.com>

<http://www.illuminations.nctm.org>

Organizations

National Council of Teachers of Mathematics, 1906 Association Drive, Reston, VA 20191-
1502 (703) 620-9840, <http://www.nctm.org>

Ten Sly Piranhas



Ten Frame

Ten Frame

Number Cards

0	1	2	3
4	5	6	7
8	9	10	

Number Cards

0	1	2	3
4	5	6	7
8	9	10	

Name _____

Ten Frame Recording

$$10 - \square = \square$$

$$10 - \square = \square$$

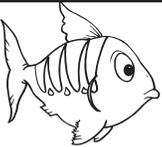
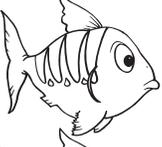
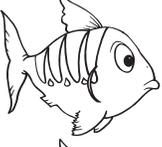
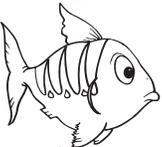
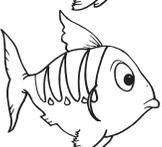
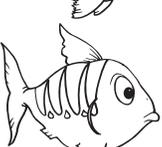
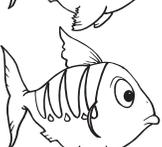
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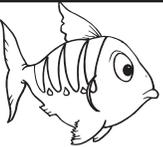
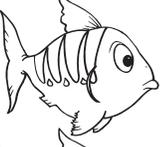
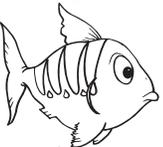
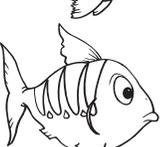
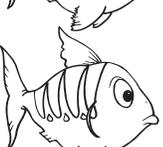
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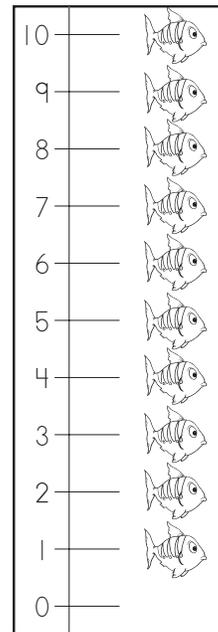
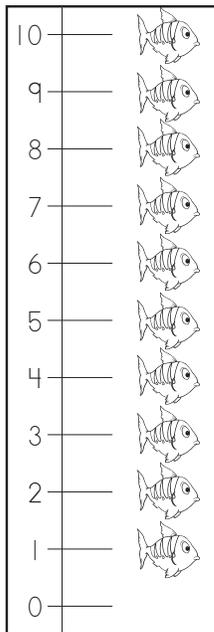
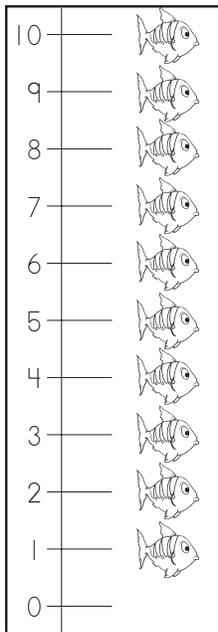
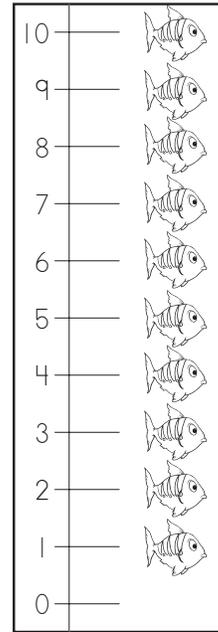
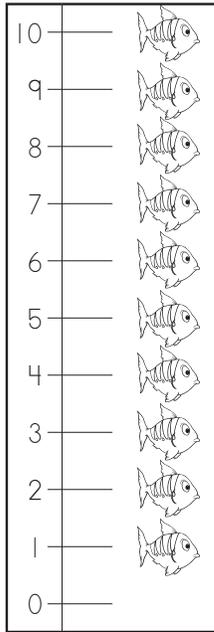
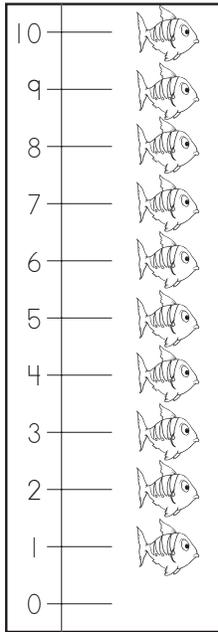
Fish Number Line

10	—	
9	—	
8	—	
7	—	
6	—	
5	—	
4	—	
3	—	
2	—	
1	—	
0	—	

20	—	
19	—	
18	—	
17	—	
16	—	
15	—	
14	—	
13	—	
12	—	
11	—	
10	—	Glue 10 Here

Name _____

Fish Number Line Recording



Fish Graph

Fish Graph Recording

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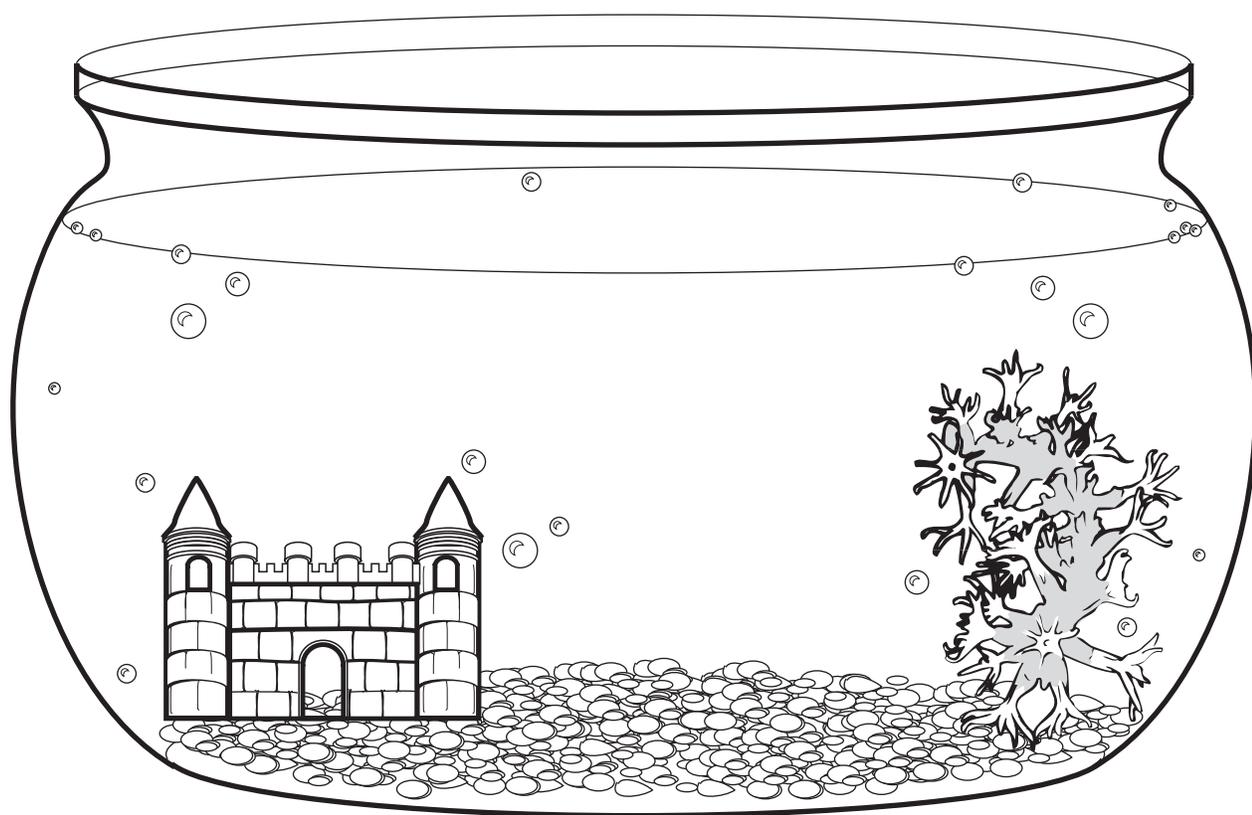
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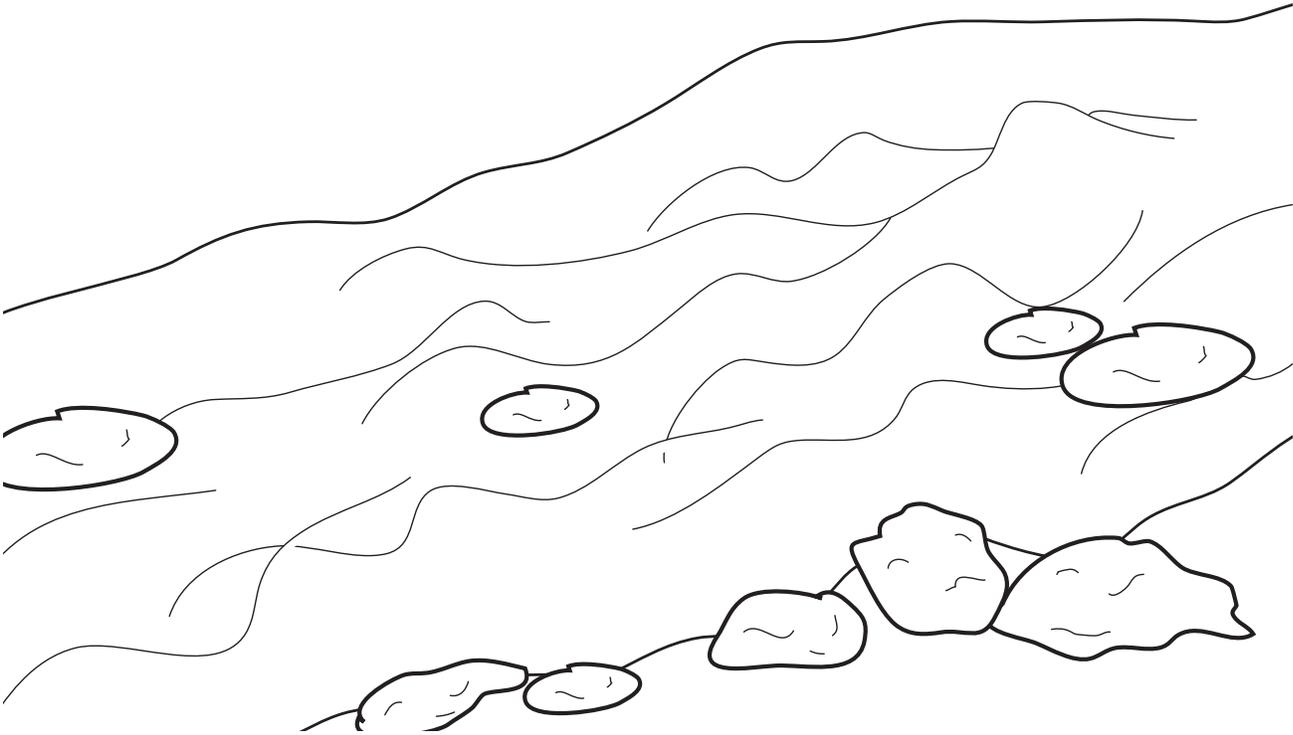
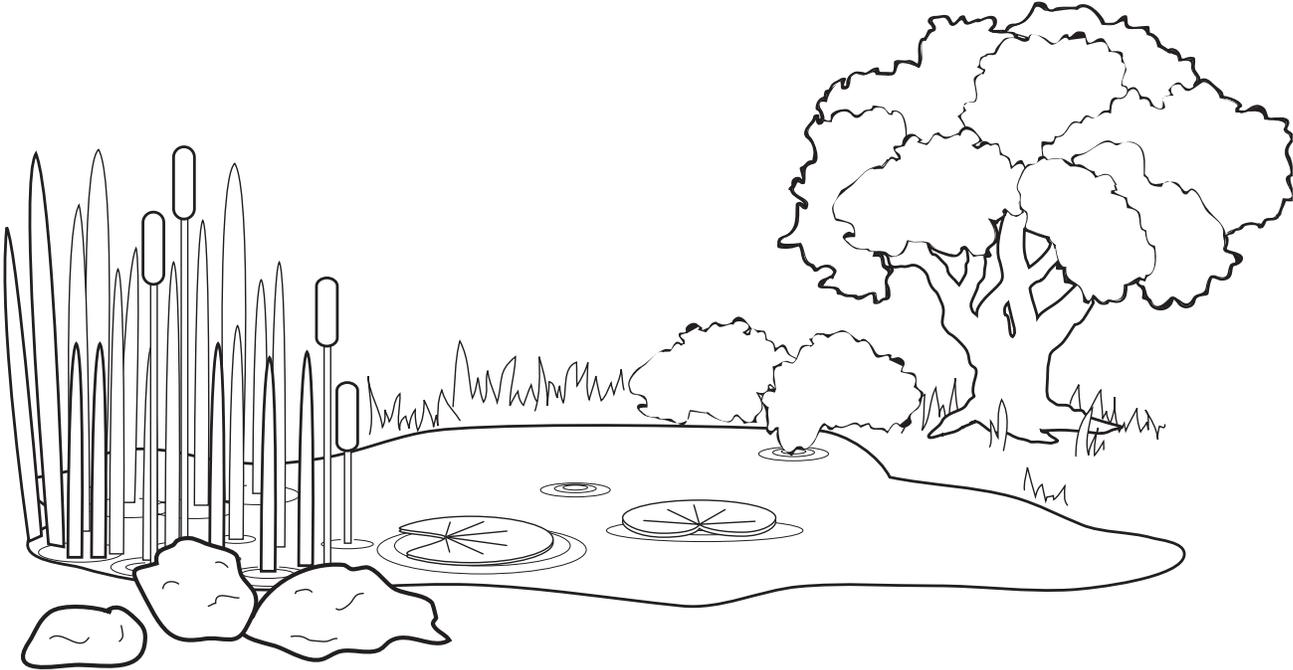
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Fish Storyboards



Fish Storyboards



Ten Sly Piranhas Practice Ideas

Dear Parents,

We have been reading the book *Ten Sly Piranhas: A Counting Story in Reverse (A Tale of Wickedness and Worse!)*. This is a wonderful story introducing subtraction.

To reinforce the concepts introduced in the book and strengthen subtraction skills, here are some ideas you can try at home with your child:

- Count out 10 Goldfish crackers and have your child “gulp” down one at a time. Talk about how many crackers there were before and after the “gulp.”
- Have your child draw a picture of a river. Have them retell the story with Goldfish crackers.
- Using 10 small items from around your home (buttons, Legos, cars, cereal) to practice subtraction.
- After practicing subtraction with the items, repeat and write numbers along with subtraction.
- Using the crackers or small items, have your child tell you subtraction stories. These are simple tales that give meaning to the subtraction process. For example: “Five birds were in the nest. Two flew away. Three birds are still in the nest.”
- Have your child make a book retelling the story of the piranhas. Let them read it to you.
- Involve your child in everyday subtraction around your home. Talk about what you are doing with them and have them solve the problem. “We need five glasses for dinner. I have three on the table. How many more glasses do I need?”

Use your imagination and have fun with your child. Math is an important skill we use everyday. Make it fun!

Thank you for your help!

Daily Math Journal

Print one at the top of each page for Kindergarten Math Journals.

1. Ten crocodiles are swimming in the river. Three climb out to rest. How many are still swimming?
2. Five sly piranhas are looking for food. They find seven fish. The piranhas each eat one fish. How many fish are left?
3. Eight frogs are swimming. There are six lily pads that can fit one frog. The frogs jump to the lily pads. How many frogs do not have a pad?
4. Ten piranhas are tired. Six go to sleep. How many are awake?
5. Two anteaters find an anthill with ten ants. They each eat four. How many ants got away?
6. Nine piranhas are swimming. Two crocodiles eat four piranhas each. How many piranhas are left swimming?
7. Seven blue butterflies land on a tree. Two iguanas each eat three. How many butterflies fly away?
8. Ten piranhas swim by two caves. Three go into each cave. How many are still in the river?
9. Eight tired turtles see six rocks to sleep on. How many turtles must still look for a sleeping spot?
10. Four bright macaws see ten beetles. They each eat two. How many beetles get away?

Content II-2

Activities

Community

Name Bingo

Standard II:

Students will develop a sense of self in relation to families and community.

Objective 2:

Identify important aspects of community and culture that strengthen relationships.

Intended Learning Outcomes:

2. Develop social skills and ethical responsibility.
6. Communicate clearly in oral, artistic, written, and nonverbal form.

Content Connections:

Language Arts I-1; Develop language through listening and speaking
Language Arts II-1; Develop print awareness

Content
Standard
II

Objective
2

Connections

Background Information

The first few days of school are crucial for setting the tone and climate in a classroom.

Playing name bingo focuses on the importance of a child's name, and builds community in the classroom. Building community in the classroom is crucial during first days of school in order to provide a class atmosphere where children feel welcome. This is a great way to meet new people and discover new things, it also lays an early foundation for a community to grow in the classroom, which is vital for success throughout the school year.

In this activity the students will listen to a story that focuses on children's names and going to school and discuss the importance of a name. This is a get-to-know-you activity that gives every student a chance to be in the spotlight as they play the Name Bingo Game. The children will need to know how to play the traditional bingo game. In this twist of the traditional bingo game, after each name is chosen, the student responds by answering one of several given questions designed to help students learn more about one another. The excitement builds as each student awaits the call of his or her name.

Research Basis

Clay, M., (1991). *Becoming Literate: The Construction of Inner Control*, Heinemann, a division of Reed Publishing (USA) inc. Portsmouth, NH. Retrieved Dec. 2007 from <http://www.readwritethink.org/lessons>

Marie Clay states, "Children will use their knowledge of letters in family names or classmates' names at later stages as part of their analysis of new words."

This classroom activity focuses on the beginning of that process of analysis. Clay explains the reason that such activities engage learners. She goes on to state: “A child’s name has singular importance as he embarks on learning about literacy, both for the child’s management of his own learning about print and for the observant teacher trying to understand his pattern of progress... It enhances his security and his self-image, giving him a feeling of importance... The use of the children’s names in a class activity is a useful way of developing letter knowledge.”

Fisher, B., (1995). *Thinking and Learning Together: Curriculum and Community in a Primary Classroom*. Portsmouth, NH: Heinemann. Retrieved Dec. 2007 from <http://www.readwritethink.org/lessons>,

Bobbi Fisher notes, “Community is the entire orchestra playing in harmony, with each musician contributing his or her best to the piece. Just as the conductor is responsible for the quality of the music, we as teachers are responsible for the quality of community that develops in our classrooms. What we expect, model, and create becomes the reality. Children will rise to our expectations of the kinds of caring and learning that should go on.”

Invitation to Learn

Weave a web filled with fun when you involve youngsters in this Name Web game. To begin have students sit in a circle. Hold the end of a ball of yarn and say, “My name is (Your name).” Toss the ball of yarn to a child across the circle. Instruct her to state her name. Then, have her hold the length of the loose yarn with one hand while tossing the ball of yarn to another child across the circle. Encourage students to repeat this process until every child has had the opportunity to say her or his name and to participate in weaving the web. If you feel your students are ready, you can challenge youngsters to repeat the process in reverse to roll the yarn back into a ball.

Materials

- School Bingo Cards
- Picture Cards
- Bingo markers
- Name bingo card I & II
- Baggies
- Class names
- Class list
- Markers
- Crayons
- Stickers



Instructional Procedures

Part One

Play school bingo. This is an activity that teaches children how to play the traditional Bingo game. The Bingo game uses pictures of materials the children will be using or pictures of things pertaining to school. For example: A school house, a pencil, box of crayons, glue, a playground, table and chairs, an apple, a school bell, etc., As you play the game you hold up a large

picture that matches the pictures on their cards, and they put a marker on their card.

1. Pass out *School Bingo Cards*.
2. Give each child some kind of marker for the game.
3. Hold up large *Picture Cards*, talking about each one as you hold it up. For example, if you hold up the crayons, you would show them the crayon box that each of them will be receiving to keep in their cubbies.
4. The students will put their marker on the bingo card that matches the picture card.
5. All the cards are the same because everyone will have blackout at the same time. The purpose of the game is not to have a winner but to learn how to play the game, and to be introduced to classroom items.
6. Gather the *School Bingo Cards*.
7. Pass out the blank *Name Bingo Cards*, and explain to the class that they are going to help make class name bingo cards.
8. Pass out a baggy with each child's name that was cut from a name grid.
9. Have the children place each name in a box of their choice on their bingo cards. Please note that names must be put in the boxes randomly to prevent multiple bingos.
10. Allow the students to individualize their cards by decorating them with markers, crayons, stickers, or other classroom materials.
11. Collect bingo cards so that the game can be played during the next session. (Before the next session all the cards will be laminated to be used as a class set throughout the school year)

Part Two

1. Introduce the book to the class and read it aloud. For example, the book *Chrysanthemum* could be used. Have a class discussion of the story.
2. Sing a name song. Give each child the opportunity to state his/her name. Several name songs and games follow this activity.
3. Hand out bingo cards randomly to students. It doesn't matter what card they get, because they decorated them the first

Materials

- Book about names
- Name Songs*
- Name Games*
- Chart paper
- Name cards



session to help make a classroom set. Give a brief review of how the game is played.

4. Hand out plenty of markers for each student.
5. Invite the students to brainstorm 5 or 6 personal questions designed to get to know one another and list them on the chart paper (for instance, what is your favorite color? What is your favorite book? Do you have any pets?)
6. Begin the game by randomly calling a student's name and holding up the large name card with the name on it.
7. Students respond by placing their markers on the called name.
8. The student whose name was called stands and responds by answering one of the questions on the chart paper.
9. Continue to play until someone yells, "Friends."
10. The Name Bingo twist is to reward the student who calls bingo by giving them the opportunity to think of another question to be written on the chart paper.
11. You can have several Bingos or play for black-out.

Materials

- Die
- Game markers
- Gathering Letters Game Board
- Markers



Optional Center Name game board/"Gathering Letters"

1. Give each twosome one die, two game markers, and one copy of the game board and a dry erase marker.
2. Each player writes his name with a dry erase marker on the graph that is part of the game board, writing one letter per box.
3. Players place their game marker on the starred game board space.
4. Player 1 rolls the die and advances his marker the corresponding number of spaces.
5. If the letter he lands on is in either his partner's name or his own name, he circles the corresponding box on the graph paper.
6. If the letter is not in either name his turn is over. Player 2 takes a turn in the same manner.
7. Alternate play continues until both names are completely colored.

Assessment Suggestions

- Did the students actively listen to the book?
- Did the students actively participate in the discussion of the story?

- Were the students able to randomly put the labels on their bingo cards?
- Did the students listen to and follow directions when filling in and decorating the bingo cards?
- Can the students match the names being held up to the names on their labels?
- Did the students actively participate in answering the questions during the game and/or creating new questions to add to the list?
- Did the students actively listen to the responses of others during the game?

Curriculum Extensions/Adaptations/ Integration

- If you find that this activity is too hard for some children, you could have the students work in pairs.
- Later in the year the bingo cards could be used again, but this time the names are only read and the children have to find the names themselves.
- If this was done later in the year, you could hold up names and have the children write the names in their boxes.
- Have the students do a journal page following the activity. They could write their name and then draw something about themselves. For example, they could draw a soccer ball because they like to play soccer.
- Instead of a journal page, you could do the same activity but make a class book.
- Research the meaning of the names in the class. Have the students create a page in their journal where they write their name and draw a picture telling the meaning of their name. Example: Hellstern means bright star; I could draw a picture of a star along side my name.
- The *Name Game* could be put in a learning center and the students could work cooperatively in small groups to play.
- The bingo cards could be used later in the year as a phonics game (for example putting markers on beginning sounds, ending sounds, names that rhyme, etc).
- Have the students write their name with markers making colored patterns out of the letters.

- Have the students draw a picture or write a word that starts with each letter in their name.
- Have the students draw a picture of themselves and then use a descriptive word that begins with their name (example: Silly Sally, Beautiful Bailey, Happy Heather, etc).
- If you had pictures available to duplicate, you could copy the pictures and give a copy of everyone's picture to each child in a bag. You could use the pictures to put on the cards instead of names.
- Have the students sit in a circle and play the "Who Are You Game". Select one student to skip around the outside of the circle as the student and his classmates help sing the following song, completing each line with his name:

(Sung to the tune of "Skip to my Lou")

My name is (Child's Name), Who are you?

My name is (Child's Name), Who are you?

My name is (Child's name), Who are you?

I'd like to know your name, too!

On the last line the child stops and gently taps a classmate on the head. That child will exchange places with the first child then skip around the circle singing the song again. Continue the game until every child has had the opportunity to circle around the group and sing the song.

- A Focus on Favorites – On a designated day, have each youngster wear is favorite color of clothing to school. Take a photo of each child. Then mount each photo as desired on separate sheet of paper programmed as shown. Help each youngster write his name in the first blank and the appropriate color word in the second blank. (_____ likes _____) Put the students completed papers in a class journal. Title the book "Colors We Like".
- Play a "Getting to know you game", to help the students build their classroom community. Sample games are listed.

Family Connections

- The students could be asked to find out why their parents chose their name. For example, were they named after someone, was the name found in a name book, were they named for a character in a movie or book, etc. Write the special story of

how they got their name and then bring back the information to share it with the class.

- Share a web site and invite families to learn more about the popularity of their names. The site includes names rising in popularity, those being used less, most frequent boys' and girls' names by year and state, etc. The web site is <http://babynamer.com/>.

Additional Resources

Books

Thinking and Learning Together: Curriculum and Community in a Primary Classroom, by Bobbi Fisher; ISBN 0435088440

Becoming Literate: The Construction of Inner Control, by Marie Clay; ISBN 0435085743

Chrysanthemum, by Kevin Henkes; ISBN 13:978-0688-14732-7

If You Take a Mouse to School, by Laura Numeroff; ISBN 0-06-028328-9

Ashok By Any Other Name, by Sandra S. Yamate; ISBN 1-879965-01-1

The Name Jar, by Yangsook Choi; ISBN 0-440-41799-6

My Name is Yoon, by Helen Recorvits; ISBN 13:978-0374-35114-4

Articles

The Mailbox, the Education Center, Inc.; ISBN 1-56234-161-8

Back-To-School Book, Preschool/Kindergarten, the Education Center, Inc. ISBN 1-56234-161-8

The Mailbox, the Education Center Inc.; Aug. /Sept. 2006

Web sites

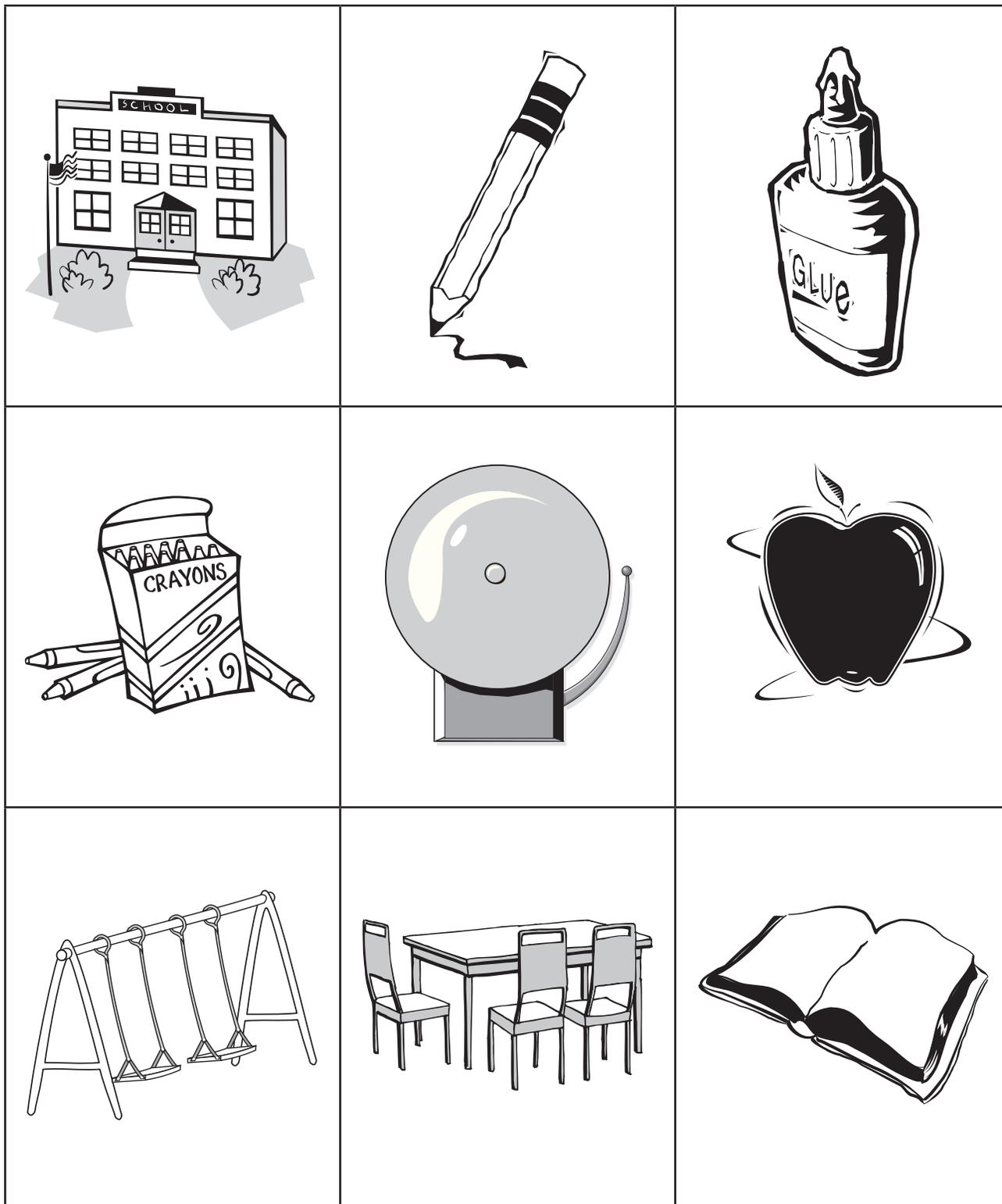
<http://www.specificurl.com>

<http://babynamer.com/>

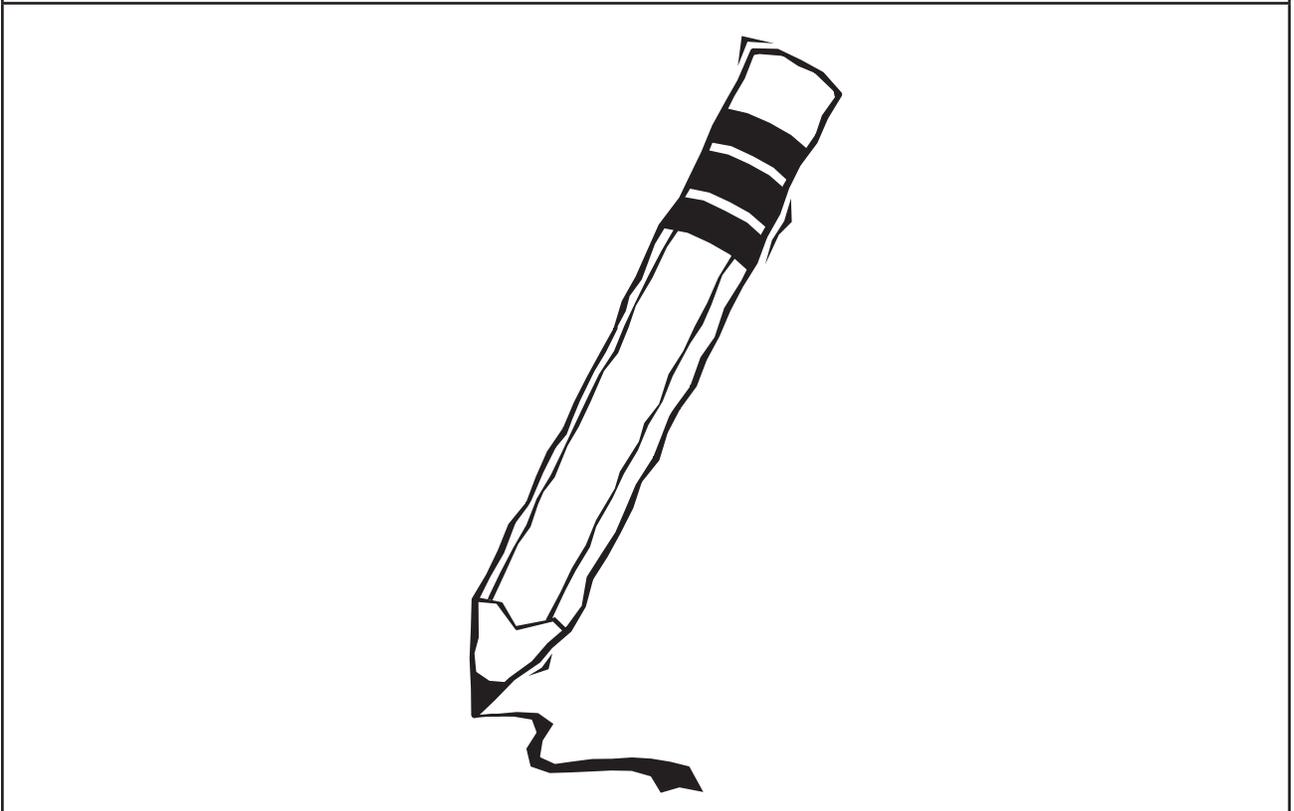
<http://www.hamrick.com/names/index.html>

<http://www.ssa.gov/OACT/babynames/index.html>

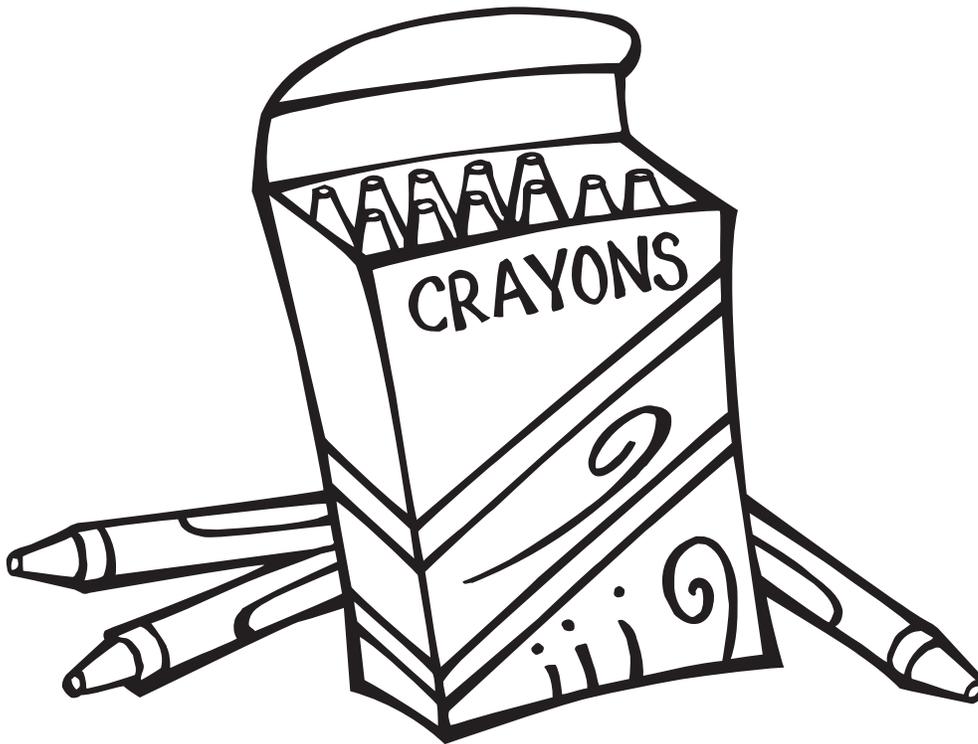
School Bingo Cards



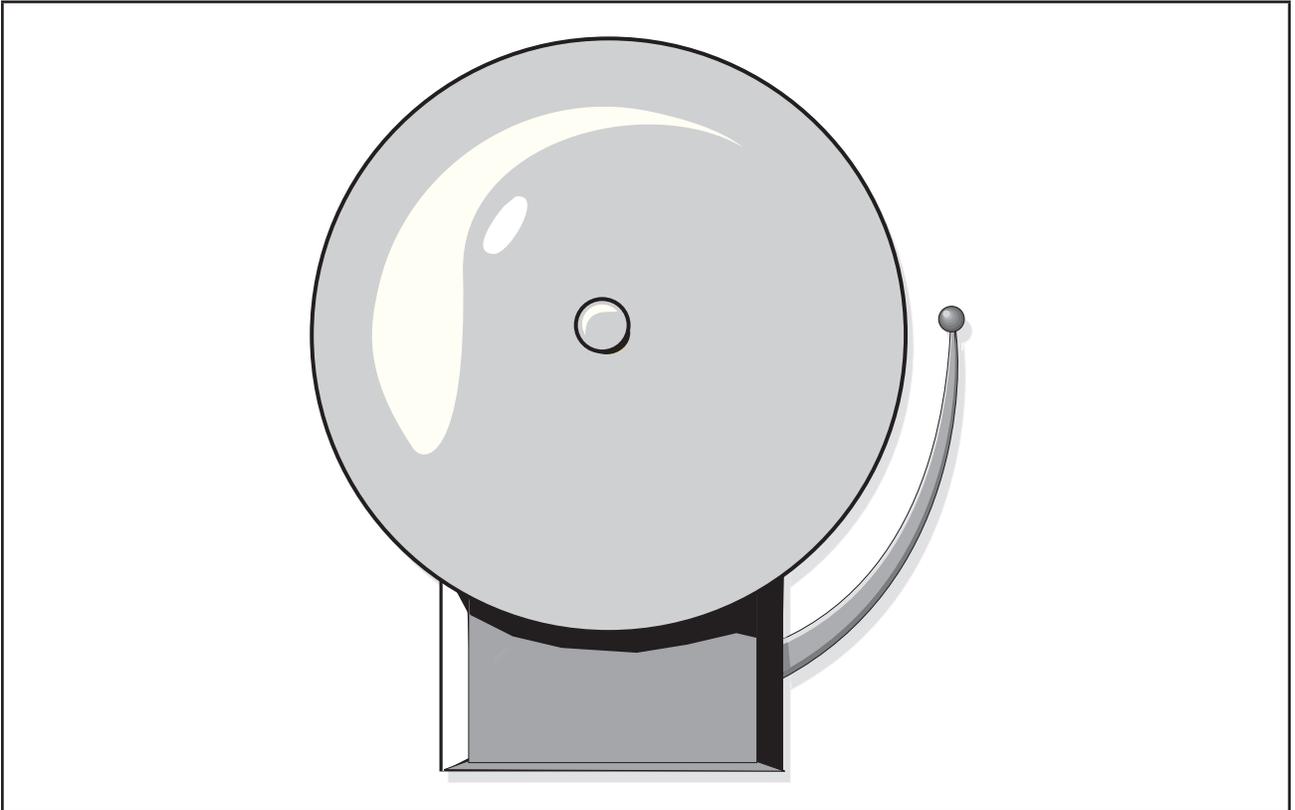
Picture Cards



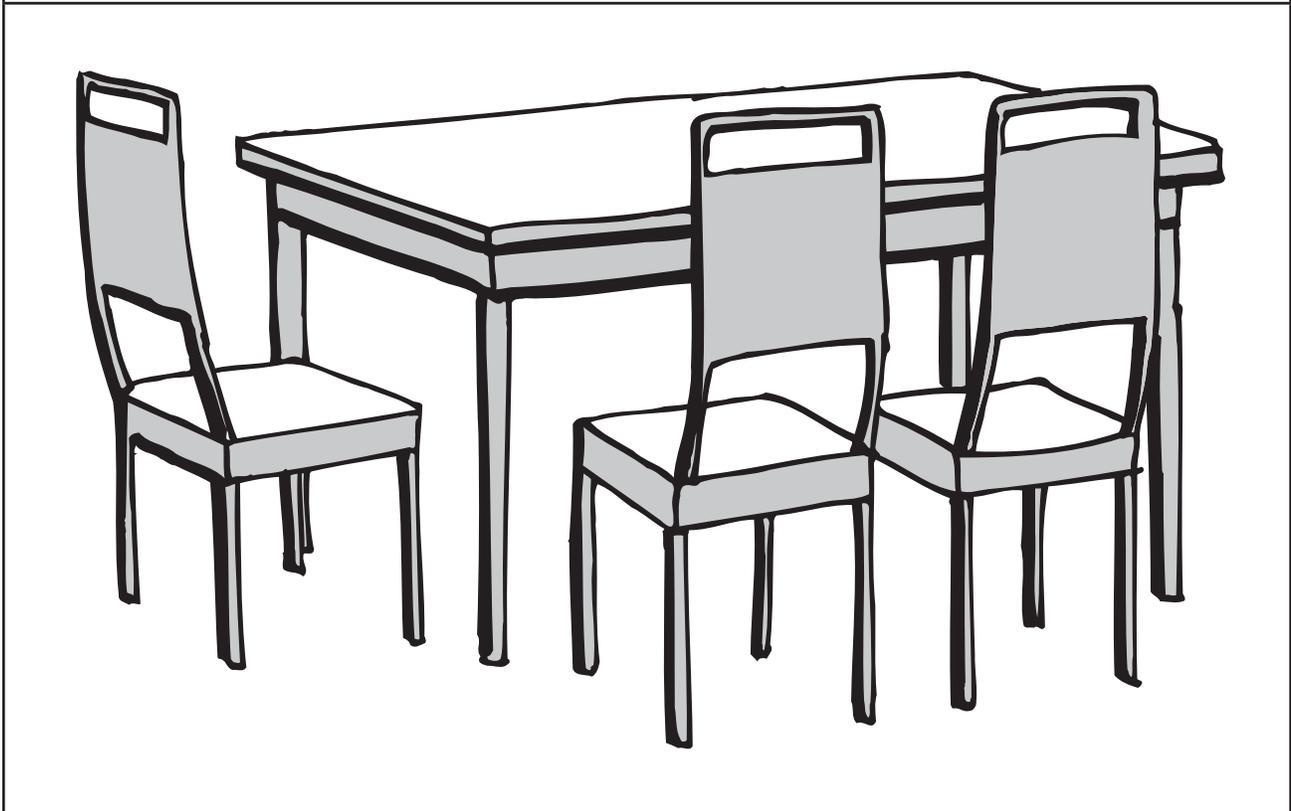
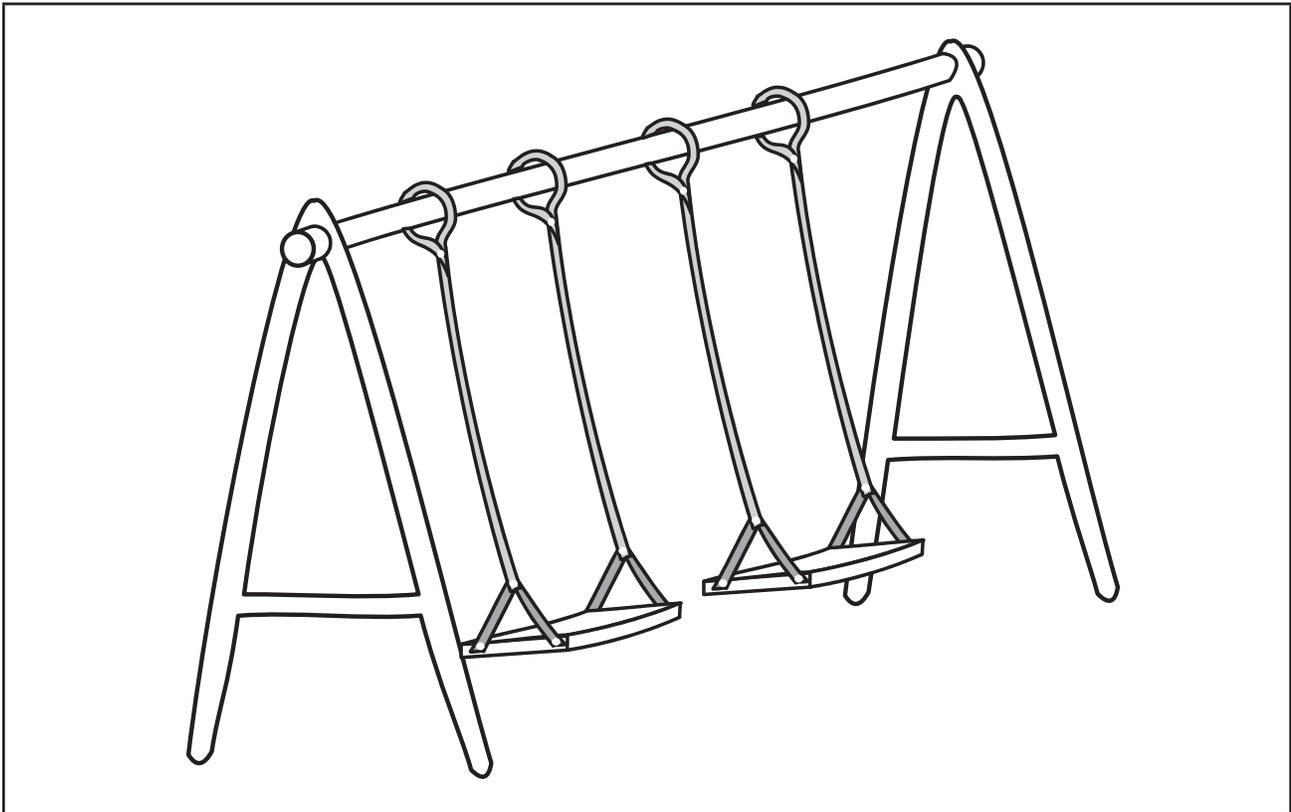
Picture Cards



Picture Cards



Picture Cards



Picture Cards



Name Bingo Card

Name Songs

Who's here at School Today?

(Sung to the tune of "Mary Had a Little Lamb")
 (Child's Name) came to school today,
 School today, school today.
 (Child's Name) came to school today,
 To draw and learn and play!

Let's Say Hello

(Sung to the tune of "Go In and Out the Window")
 Let's say hello to (Child's Name).
 Let's say hello to (Child's Name).
 Let's say hello to (Child's Name).
 We're glad you're here today!

Where is . . . ?

(Sung to the tune of "Are You Sleeping")

Teacher: Where is (Child's Name)?
 Where is (Child's Name)?

Child: Here I am.
 Here I am.

All: How are you today sir? (Or maam)

Child: Very well I thank you.

All: Ding, Dong, Ding!
 Ding, Dong, Ding!

Apple Name Song

(Sung to "Mary Had a Little Lamb")

One little apple round and red
 Fell kerplunk on someone's head
 One little apple round and red
 Fell on _____ head.

Everybody has a Name

(Sung to "Mary Had a Little Lamb")

Everybody has a name,
 Has a name, has a name.
 Some are different, some the same,
 Tell me what is yours!
 Mayita Dinos

If You're Name Is

(Sung to "If You're Happy and You Know it")

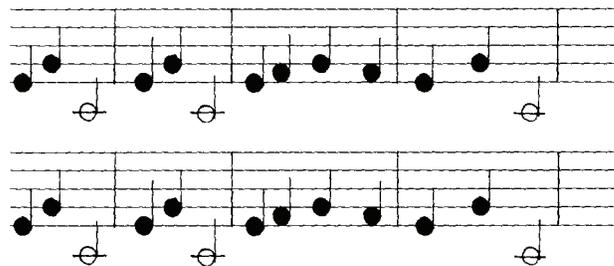
If your name is _____, stand up now.
 If your name is _____, turn around.
 If your name is _____, touch your knees
 and then your toes.
 If your name is _____, sit on down.

*Sing the song using the names of the students
 in the class. You can also substitute different
 actions after each name.

HELLO, HELLO

Teacher: Hello, Hello, Hello
 And how are you?

Child: I'm fine, I'm fine
 And I hope that you are too.



Name Games

GROUP JUGGLE

Ask your students to form a circle. A soft ball is passed around the circle with each person making eye contact with and saying the names of the people next to them while handing him/her the ball. Students are told to make sure they remember the people who are standing on both sides of them. Then, the students all switch places. The ball is now tossed underhand from person to person, keeping the original order of the circle which has not been mixed up. Once the group can complete the pattern comfortably, a second ball is tossed in after the first ball is halfway through the pattern. The object is to not drop the balls or get confused with more than one ball being through at a time. More and more balls can be added. As the group gets better, consider adding in some different throwables. Rubber chickens work well, as do fleece balls.

INSTANT REPLAY

Have children form a large circle. One person starts by moving a few steps into the center and announcing his name while performing whatever movements and gestures he chooses. For instance, one might skip into the center and perform a ground sweeping wave of the hand, proclaiming to all, “Andy,” and then skips back to his place in the circle. That is the signal for everyone else to do exactly as he did, in unison, mimicking him in both deed and word as closely as possible. Repeat the procedure until all players have had a chance to introduce themselves.

An additional variation: Have a player move into the center and announce a word that describes himself (funny, smart, fast, etc.).

YOU'RE IN THE SPOTLIGHT

Have the group form a circle, sitting down, with one player in the middle holding a flashlight. Make the room as dark as possible by closing curtains and turning out the lights. The person in the middle puts the flashlight on the floor and gives it a spin. The person who is in the spotlight when the flashlight comes to stop must introduce himself and tell the others one thing about himself. That person then goes to the middle and becomes the next spinner. Toward the end of the game, player's may simply point the light at someone that hasn't been introduced.

A Bearriffic Home Adventure

Content
Standard
II

Objective
2

Connections

Standard II: Students will develop a sense of self in relation to families and community.
Objective 2: Identify important aspects of community and culture that strengthen relationships.
Intended Learning Outcomes: <ol style="list-style-type: none">1. Develop; social skills and ethical responsibility.2. Demonstrate responsible emotional and cognitive behaviors.3. Communicate clearly in oral, artistic, written, and nonverbal form.
Content Connections: Content, I-3; Communicate ideas, information, and feelings Language Arts, I-1; Listening and speaking

Background Information

Students take turns taking home a suitcase (or a container with a handle) that includes a teddy bear, a letter to the parents, a plain piece of paper, crayons, and a journal to complete as a family. The students then return the bag the following day and share their entries with the class. After every student has taken the suitcase home, the journal is bound into a book for the classroom library. The goal to get parents involved with their child's school and to help the children learn how to keep a journal.

Research Basis

Carr, M., (1999) *Homework*, Educational Consultant, for the LDAT Conference, November, 1999, p. 1 of 4. Retrieved Dec. 2007 from <http://ourworld.compuserve.com/homepages/LDAT/homework.html>

Teachers play a vital role in the selection, assignment, and use of homework. Research indicates that where homework assignments are meaningful and relevant, student achievement increases. Teachers will maximize the effectiveness of homework if they will assign activities which are relevant to the child outside of the classroom. Assign homework that enriches, reinforces, or supplements classroom instruction.

New, R. S., (2005). *An Integrated Early Childhood Curriculum*, KITS (Kansas inservice training system) Summer Institute Presenter, Fall 2005, Volume 14, Issue 4 Newsletter. Retrieved Dec. 2008 from <http://www.KSKits.org/publications/NewsletterPDF/fall05.pdf>

When children's learning in school is linked to their lives outside the classroom, their interests are multiplied and they often seek additional opportunities to pursue related activities. Curriculum must

thus embrace the classroom environment as a place in which children can find traces of their past experiences as well as their current interests, plans, and activities, emphasizing the need for connections and continuity among the children, their activities, and their multiple (home and school) contexts of their learning and development.

Providing high-quality inclusive and heterogeneous classrooms provides the opportunity for children to learn from one another. Children have an opportunity to learn from and with others. They learn to accept and support one another, recognizing that everyone has something to give and receive preferred value in a democratic society.

Invitation to Learn

Read aloud *If You Take a Mouse to School*, by Laura Numeroff. Then show students a small stuffed animal. I choose a teddy bear because it is our school mascot. You could use your school mascot or have your class choose an animal. Ask them to imagine what it would be like if the teddy bear was taken to different parts of the school. Who might they meet?

In advance, the teddy bear will have visited each school worker with whom the students need to become familiar with - such as the principal, secretary, librarian, etc. Pictures were taken with the bear and the school worker. These pictures will be shown to the class. As each one is shown, the worker is introduced to the class (or is reviewed, depending on the time of the year the activity starts), telling the class the name of the worker and what he or she does for the school. Put the pictures on the dry erase board with magnets. Pass out pictures of equipment or the actual tools these school workers would use in their work. The students will take turns coming up and putting the correct picture by the correct school worker. Examples of school workers and equipment: Custodian-broom, Cook—mixing spoon, Librarian—book, secretary—telephone, Principal-large chair, Computer specialist—Computers.

The students will proudly share information about their school when they sing a song about important school workers, “I Know About My school”.

Later, mount each photograph on a separate sheet of paper and add a student-generated caption. Then bind the papers between two covers to make a class book, labeling it, *If you take a Bear to Sunrise Elementary . . . ?* (Using the name of your school).

Teach your students this song replacing the bold face word in the first verse with your school name. During the second verse, hold up a

Materials

- If you take a Mouse to School*
- Stuffed animal
- Pictures of school workers
- Construction paper
- White paper
- Spiral binding
- School personal equipment



picture and name the school worker and her title in place of the bold face words. Repeat the second verse for each picture, filling in the corresponding information.

SONG: "I KNOW ABOUT MY SCHOOL"

(Sung to the tune "Skip To My Lou")

I go to class at **Sunrise** School.

I go to class at **Sunrise** School.

I go to class at **Sunrise** School.

I know about my new school!

Mrs. Toolson is the principal at my school.

Mrs. Toolson is the principal at my school.

Mrs. Toolson is the principal at my school.

I know about my new school!

Instructional Procedures

Materials

- I Know About My School*
- Clothes for the bear
- Notebook
- Suitcase
- Plain paper
- Sheet protector
- Crayons
- Imagination!
- Parent letter



1. Fill the suitcase with all the items: A notebook, plain paper in a plastic sheet protector, teddy bear, clothes for the bear, crayons, and a letter to the parents.
2. Explain to the kids that this is the class bear and he will go home with each child for 2 days and be their buddy. Their responsibility is to make sure he is safe and has a nice time.
3. After their two days are done it is also their responsibility to work with Mom and Dad to write in the notebook all the things that the bear did while he stayed with them.
4. They are also to make a picture of their favorite thing they did with the bear and write a small sentence at the bottom of the picture.
5. All these things are then to be put back in the suitcase and brought back to school.
6. During the year all the pictures can be put together and laminated to make a book of all the things the bear did. The book can be added too on a weekly basis.
7. The journal should be kept and read each time a student adds to it.

Assessment Suggestions

- The students were able to identify the school family and explain what parts they play for the school.
- The students showed responsibility as they took the bear home, kept it safe, and brought it back at the appropriate time.
- The students were able to express themselves through drawings and journal writing as they shared the bear’s adventure.
- The students were able to express themselves verbally as they reported the bear visit to the class.

Curriculum Extensions/Adaptations/Integration

- Terrific Teddy (With this torn-paper technique, no two bears are alike!)

Steps:

1. Tear the edges of the 6” x 9” rectangle (body), 5” square (head), and the two long rectangles (arms).
 2. Glue the head and arms to the body.
 3. Tear the edges of the four 3” x 4” rectangles. Glue them to the project to resemble legs and feet.
 4. Tear two ear shapes from construction paper scraps. Glue them in place.
 5. Draw a face and add marker details to the paws and ears.
 6. Cut a bow tie from construction paper and add desired marker details. Glue the bow tie to the bear.
- At the beginning of each kindergarten year, the students could vote on the mascot they would like to have for their class. Then the mascot could be purchased and used as the animal sent home in the suit case.
 - Choose a class mascot; let him visit the classroom for a few days. Then take him on a school tour, including library, music class, PE, etc.

Family Connections

- Students take turns taking home a book bag that includes the class mascot, a book to read with their families, a topic to discuss, and a journal to complete as a family. The students then return the bag and share their entries with the class. After

Materials

- 6” x 9” brown construction paper rectangle (body)
- 5” brown construction paper square (head)
- Two 3” x 6” brown construction paper rectangles (arms)
- Four 3” x 4” brown construction paper rectangle (legs and feet)
- Brown construction paper scraps (ears)
- Colorful construction paper scraps (bow tie)
- Glue
- Markers, including black
- Scissors



every student has taken the bag home, the journal is bound into a book for the classroom library. The teacher then selects a new topic and book to start a second rotation. Example of a book and discussion: *The Kissing Hand*, asking families to write about their child starting school.

- What is your favorite book? Write about what makes this book special to you. Bring it to school to show us!
- Some of the students have a special pet; some may have a pet that they would like someday. They can write and tell the class about it and draw or bring a picture of the pet or the pet they would like to have.
- Students will learn and appreciate the “personal treasures” of their classmates as well as their own. With the help of their families ask the students to choose and describe three treasures—one that is personal, one that is a family treasure, and one that is a cultural treasure (you may want to just focus on a personal treasure for kindergarten students). Explain that you do not necessarily mean something of monetary value. Treasures could be a language, a song, or even just a story. When the students share with the class it could be a write-up, photographs of the treasures, or the treasures themselves.

Additional Resources

Articles

The Mailbox, the Education Center, Inc.; ISBN 1-56234-161-8

Back-To-School Book, Preschool/Kindergarten, the Education Center, In. ISBN 1-56234-161-8

Web sites

<http://www.readwritethink.org/lessons/>

<http://www.atozteacherstuff.com/>

<http://www.google.com/search?hl=en&q=canteach>

<http://www.memfox.net/>

Bearrific

Meet Bearrific, our new Kindergarten friend! Bearrific is so excited to be in our class, and best of all, he will get to come home with each of you. He will go home for 1 or 2 days and be your buddy. Your responsibility is to make sure Bearrific is safe and has a nice time.

After the 1 or 2 days are done, you and your family can write in the notebook about all the things that the bear did while Bearrific was visiting. Using the paper in the sheet protector as your journal entry, draw or take a picture of your favorite thing that you did with the bear while your family helps you write a small sentence at the bottom of the picture.

Make sure Bearrific and his suitcase and belongings are returned after the 1 or 2 day visit, so you can share your journal entry with the class.

When everyone in our class has had a chance to have Bearrific come to visit them, we'll make our journal entries into a book for our classroom. You will all be authors of our class book.

Ways to Celebrate in the Winter

Content
Standard
II

Objective
2

Connections

<p>Standard II: Students will develop a sense of self in relation to families and community.</p>
<p>Objective 2: Identify important aspects of community and culture that strengthen relationships.</p>
<p>Intended Learning Outcomes: 2. Develop social skills and ethical responsibility. 3. Demonstrate responsible emotional and cognitive behavior. 6. Communicate clearly in oral, artistic, written, and nonverbal form.</p>
<p>Content Connections: Math I-1&2; Use one-to-one correspondence Math II-2; Identify patterns in the environment Language Arts I-1&2; Develop language through listening, speaking, viewing media Language Arts VI-1; Learn new vocabulary</p>

Background Information

Children everywhere love holidays/celebrations – days set aside for a break in routine, special fun and surprises, delicious treats, and a time to be with close friends, relatives and neighbors. Religious, seasonal, and patriotic holidays and celebrations vary with the customs, history, environment, and traditions of countries around the world. One way the world becomes smaller and people begin to develop respect, acceptance and understanding of others is by sharing celebrations of everyday life. Helping children discover how children everywhere are alike and can work and play together leads to multi-cultural awareness and sensitivity.

Very young children do not always comprehend the history or deeper meaning involved in other cultures' celebrations, but they can learn the name of the celebration and begin to understand some of the outward symbols for the inner meanings. Children can learn that not everyone believes the same thing, and that we must respect each person's right to individual beliefs. As children learn of customs and celebrations, they can learn that they all have some beliefs in common and some that differ. Five different Winter Celebrations will be addressed, giving the children opportunities to experience games, art, music, and stories of different cultures.

On December 13th, many Christian countries in Europe celebrate St. Lucia Day. The story behind the holiday is of a young girl who lived over 1700 years ago. She would not deny Christianity, so she

was punished—her eyes were put out and she was put to death by the Romans. She was subsequently made a saint. In Sweden, a young girl, usually the oldest daughter, dresses up in a long white dress tied with a red sash and a leaf covered crown of candles. On the morning of December 13th, she and other costumed children awaken their family members with a tray of coffee and pastries. St. Lucia Day is celebrated in Sweden, Finland, Italy, and the Caribbean.

Hanukkah, a festival of light, comes in late November or December and begins on the 25th day of the Hebrew month Kislet. The Hebrew calendar is a lunar one, so the exact date of Hanukkah varies each year. Hanukkah celebrates religious freedom for the Jews. Antiochus, a Syrian king, drove the Jews from their temple in Jerusalem and ordered them to worship Greek gods or be put to death. The Jews fought back and finally regained Jerusalem and set about purifying their temple, which the Syrians had defiled. When it was ready, they proclaimed a holiday and called it Hanukkah, which means “dedication.” There is a legend about the first Hanukkah that relates how only one little jar of oil was found to light the holy lamp in the temple for the festival. It should have lasted only one day, but it lasted eight days. Hanukkah is celebrated for eight days. Candles are lit each night in a special candleholder called a menorah (meh-nor-ah). A candle known as the Shamash (shah-mush) is a ninth candle in the center that is higher than the other four on each side, and is lit every night. Families enjoy eating potato pancakes called latkes (lot-kuhs). Children like to play games with a dreidel (dray-dull). The dreidel is a four-sided top with Hebrew letters on each side representing the words in the phrase “A Great Miracle Happened There.” Gifts are generally given to children—one each night. Frequently bags of chocolate coins covered with gold foil are in favor in American families.

The Posada celebration is way of celebrating Christmas in Mexico. The posada, is a re-creation of Mary on a donkey and Joseph searching for a room at the inn. Accompanying them is a choir of small children who knock on doors asking for lodging for the weary couple. The procession, which takes place during the 12 days before Christmas, moves along, growing in numbers, until it reaches the church, where mass is held. After the service, the children get to enjoy a festive piñata party. The Posada is an enactment of looking for lodging of St. Joseph and Virgin Mary, called the Pilgrims going to Bethlehem for the Census according to the Bible. Each family in a neighborhood will schedule a night for the Posada to be held at their home, starting on the 16th of December and finishing on the 24th. Every home will have a Nativity scene. The hosts of the home are the innkeepers, and the neighborhood children and adults are looking for lodging. They

will ask for lodging in three different houses but only the third one will allow them in. Once the innkeepers let them in the group of guests come into the home and kneel around the Nativity scene to pray. After all the prayer is done, then it comes time for the children's party. There will be a Piñata, filled with peanuts in the shell, oranges, tangerines, and sugar canes. The children in turn will try to break the Piñata with a stick while blindfolded.

Kwanzaa (keb-wahn-zab) is a holiday that was created for Afro-Americans by Dr. Malana Karenga in 1965 to help focus on the richness of their African culture and reinforce the need for Black unity and self-determination. At the heart of Kwanzaa is the “Nguzo Saba” or seven principles of daily living, that Dr. Karenga found in the African harvest festivals he had studied. Kwanzaa is celebrated from December 26th to January 1st. Each night, a candle is lit and a principle discussed. The last night, a Karamu (feast) is held.

The Seven Principles of Daily Living

1. Nguzo Saba umoja (oo-MO-jah) – unity, we help each other.
2. kujichagulia (KOO-jee-cha-go-LEE-ah) – self-determination, we decide things for ourselves.
3. ujima (oo-JEE-mah) - cooperation, we work together to make a better life.
4. ujamaa (oo-jah-MAH) – sharing by all, we must share what we have.
5. nia (NEE-ah) – purpose, we have a reason for living.
6. kuumba (koo-OOM-bah) – creativity, we need to use creativity in making our world more beautiful.
7. imani (ee-MAH-nee) – faith, we believe in ourselves, our ancestors, and our future.

Chinese New Year (Yuan Tan) is celebrated on the first day of the new moon, which varies from January 21 to February 19. The Chinese celebrate this day to show their appreciation for the previous safe and happy year and to wish for another prosperous year to come. The first day of this religious and historical celebration is dedicated to worshipping ancestors and Buddha and to praying for happiness, prosperity and good fortune. The following 14 days are filled with parades, fireworks, gift giving, feasting and dancing. Red is the symbol of happiness to all Chinese. This color is always used for New Year's decorations. Friends exchange greetings in red envelopes. On this holiday, children receive gifts of money from older people, such as their grandparents, parents, aunts, and uncles. The gift money is given

in red envelopes, often with gold lettering or pictures on them. It is important to Chinese children and their parents to wear new clothes, especially new shoes, on New Year's Day to bring good luck. A lion dance or dragon dance performed by adults is an important part of this New Year's parade.

Research Basis

Spellikngs, M., (2006) Secretary of Education remarks at S. University Presidents Summit on *International Education* in Washington, D.C. Retrieved January 25, 2008 from www.ed.gov/news/speeches/2006/01062006html

Education teaches more than students. It teaches all of us to see beyond our borders and boundaries, both real and imagined. It teaches us to overcome stereotypes and appreciate cultures other than our own. In so doing, it gives us hope for a brighter future by advancing freedom, opportunity and understanding.

Seefeldt (1977). *Social Studies for the Pre-School child*. Upper Saddle River, NJ: Merrill/Prentice Hall.

Young children, through activities involving relationships with others, cooperative group experiences, and many forms of firsthand experiences, can develop awareness of: 1) the interdependency of humans on one another, (2) the cultures of our world, and (3) the similarities between people everywhere. (p. 153)

Invitation to Learn

Students will be given a brief overview of the celebration that will be covered during the next two months. They will then be given a "Celebrating Winter Holidays" Journal. The journal has calendars and symbols for each of the winter holidays we will be talking about. The students will color in the dates on the calendar; illustrating the month and days the celebration takes place. Students will write their name on the front, decorate the cover, and save it to be used after each celebration lesson. This journal will be used as an assessment at the end of each celebration discussion.

Instructional Procedures

Hanukkah

1. Gather the children together and show them the world map. Point out the country of Israel.
2. Have them find Israel on their journal *World Maps* and mark it.



Materials

- Celebrating Winter Holiday
- World map
- Festival of Lights
- Menorah
- Tasty Menorahs Instructions
- Large chart
- Eight nights of Hanukkah
- Herschel and the Hanukkah Goblins
- Dreidel Pattern
- Dreidel
- Parent Letter
- Scissors
- Pennies
- Lights the Candles Bright
- Pencils
- Lightweight cardboard
- Markers/Colored pencils

3. Share that a long time ago, over two thousand years, the Jewish people there fought against an army to take back their Temple, or house of worship. They cleaned and fixed the Temple and polished the lamp of the Eternal Light. The flame had been put out by the army. Only enough olive oil could be found to light the lamp for one day. A miracle happened and the lamp stayed lit for eight days!
4. Hanukkah is an eight-day Jewish Celebration, commemorating “the miracle of the oil.” The “Festival of Lights” holiday is full of songs, games, stories, and presents. Jewish people around the world celebrate Hanukkah by lighting one candle each of the eight nights of Hanukkah until all are lit on the last day of the holiday. The special lamp of eight candles is called a menorah. Show the students a picture of a menorah.
5. Read one of the informational Hanukkah Books like *Eight Nights of Hanukkah* or *Festival of Lights*. List all the things that they learned from the book on the dry erase board.
6. Food Experience: Share the Tasty Menorahs with the children.
7. While the children eat the Tasty Menorahs, read the “Eight Little Candles in a Row” poem. Have it printed on an experience chart.
8. Then read a story book like *Herschel and the Hanukkah*.
9. Show the children a dreidel or a picture of a dreidel. Ask them to notice the letters. Are they the same letters we use? Share with the students that during Hanukkah, friends and family gather and eat traditional foods, such as latkes, applesauce, or jelly-filled doughnuts. Latkes are fried potato pancakes. Children sometimes exchange gifts and receive “Hanukkah Geit,” or coins. They also play the dreidel game by spinning a top with four flat sides. Demonstrate how to play the game with three children, plus yourself (four players in all).
10. Teach the students the song “I Have a Little Dreidel.”
11. Give each student a copy of the card stock dreidel. Have them cut it out. Demonstrate how to push the pencil through the hole. Show the students how to spin the dreidel like a top by holding the top of the pencil and spinning it on a flat surface. The tip of the pencil will make contact with the flat surface. Play until one player wins everything and the other players have nothing.

12. Divide the students into groups of four. You may want to have a small square of cardstock underneath to protect the tabletops. Allow children to play.
 - a. Each player puts two of their objects into the center “pot”.
 - b. Give each player a turn to spin the dreidel (like a top). The letter that is facing up when the dreidel stops tells what the player must do:
 - Nun - do nothing
 - Gimel - take all objects from the pot
 - Hay - take half the pot
 - Shin - put one object in the pot.
 - c. If the pile is empty, or has only one penny, each player puts in one penny before the next spin.
13. After they have played the game a few times, pass out the game and rules for playing the game for the children to take home to play with their family. Have this copied on card stock.
14. Sing the song “Light the Candles Bright” (*sung to: The Farmer In the Dell*).
15. Have the students draw and record in their journal about the celebration of Hanukkah.

St. Lucia Day

1. Many Countries in Europe Celebrate St. Lucia Day. We are going to talk about the celebration as it takes place in Sweden. Find Sweden on the class world map, and have the students mark their world map in their celebration journal.
2. Explain the story of St. Lucia to the students. St. Lucia Day is celebrated on December 13. The story behind the holiday is of a young girl who would not deny Christianity so she was put to death by the Romans.

In Sweden, a young girl, usually the oldest daughter, dresses up in a long white dress tied with a red sash, and places a crown of evergreens adorned with glowing candles on her head. It is her task to serve coffee and special twisted buns with raisins to her family at daybreak. The buns are twisted into different shapes. The lights represent the breaking of the winter spell and bringing light into the world.

St. Lucia is followed by her brothers, who are dressed in white and wear pointed hats with silver stars. They are called



Materials

- Green, yellow, white construction paper
- Celebrating Winter Holidays*
- World map
- Leaf Pattern*
- Candle Pattern*
- Flame Pattern*
- Star Pattern*
- Scissors
- Heavy paper
- Gold glitter
- Twisted pastries
- Serving tray
- Glue
- Stapler
- Markers/colored pencils

“star boys.” Her sisters wear white robes too, but have tinsel in their hair. They are called “Lucia Maidens.”

This ceremony is to assure the family that beginning on this day (the shortest, darkest day of winter) the days will begin to be longer again. It also reminds them that Christmas is near. Some call it Little Christmas.

2. Have the girls make a crown of candles. To make a crown use a pattern of five green leaf shapes on construction paper and five yellow candle flames on construction paper. Cut out the patterns. Glue each flame cutout to the candle pattern on white construction paper to create a candle; then glue each candle to the straight end of a leaf cutout. Arrange the candle-adorned leaves end-to-end. Glue the pieces together by attaching a leaf tip to the bottom of each of the first four candles. When the glue has dried, size the resulting crown to fit the head of the intended wearer; then staple the crown ends together.
3. Have the boys make a star-studded hat. To make a hat, begin with a semi-circle of white bulletin-board paper – diameter approximately 28 inches. Overlap the two corners of the paper until a cone is formed. Size the opening to fit the head of the intended wearer; then staple the hat seam. Decorate the hat with yellow paper stars from the star pattern and gold glitter.
4. Have each child wear a decorative head wreath or hat as they serve themselves a pastry from a tray passed from child to child.
5. Have students draw and record in their journals about the St. Lucia Day celebration.

Materials

- Celebrating Winter Holiday
- World map
- Nine days to Christmas*
- Sangrias drink ingredients
- Piñata
- Paper sacks
- Crepe paper
- Tissue paper
- Wrapped candy
- Newspaper
- Scissors
- Stapler
- Glue
- Salsa & chips
- Markers/colored pencils



Las Posadas

1. Begin by reading the book, *Nine days to Christmas*. In this story a little girl excitedly prepares for her first “posada”. The book clearly explains the meaning of the celebrating (“posada” means shelter, and during the posada procession the participants are symbolizing the journey of Mary and Joseph to Bethlehem) and this will set the purpose for the rest of the unit.
2. Show the students where Mexico is on the class world map. Then have the children locate it on their own world maps. List on the dry erase board the things they learned from the book as the children recall them.
3. Have a Mexican food experience. Salsa & chips are easy. You can also have a simple Mexican drink (Sangrias for kids)

Ingredients

½ cup grape juice

¼ cup orange juice

¼ to ½ cup Sprite or 7up (depending on how bubbly you like it)

OPTIONAL: maraschino cherry and/or orange slice

Directions

Mix ingredients, add ice cube and serve! YUM!

4. Dramatize the posada by going from class to class in the kindergarten wing, asking for shelter. Prepare the other classes ahead of time for best results. Be turned away by class after class. Finally, return to our classroom for a party celebration, complete with a piñata.
5. You can purchase a piñata or have the children help make 4 different ones in centers by making simple paper bag piñatas. To do this fill a paper grocery bag with wrapped candies and newspaper. Decorate the bag with brightly colored, fringed crepe paper or tissue paper. Cut small slits in the bag to weaken it before students whack at it with a yardstick.
6. Have children draw and record in their journals about the Mexican posada.

Kwanzaa

1. Unlike the other holidays we have talked about, this celebration is not a religious holiday. Kwanzaa is an African American celebration that focuses on the traditional African values.
2. Find Africa on the classroom world map.
3. Read *The Story of Kwanzaa*.
4. Explain that Kwanzaa is based on seven guiding principles, one for each day of the observance, and is celebrated from December 26th to January 1st. Each principle is symbolized with a candle. A *kinara* is the candle holder that holds the seven candles. Each night, a candle is lit and families talk about one of the seven principles. Candles play an important role in the Kwanzaa celebration. On the first night of Kwanzaa, the black candle is lit. On each night thereafter, an additional candle is lit, alternating red and green until the entire Kinara is glowing on the final night of Kwanzaa.

Materials

- Celebrating Winter Holiday*
- World map
- Kinara*
- Construction paper
- Fruits and Vegetables
- Obara the Merchants*
- Obara the Gatekeeper*
- Scissors
- Ruler
- The Story of Kwanzaa*
- My First Kwanzaa Book*
- Kwanzaa Place Mat*
- Hand-some Kinara*
- Glue/Tape
- Red, black, green, brown & yellow paint
- Paintbrushes
- Markers/colored pencils



These seven candles represent the seven principles which are 1) unity, 2) self-determination, 3) collective work and responsibility, 4) cooperative economics, 5) purpose, 6) creativity, and 7) faith. Show the Kinara picture.

5. Read *My First Kwanzaa Book*.
6. Explain that the colors of Kwanzaa are black for the face of the African people, red for the blood of the people shed, and green for the hope and the color of the motherland.
7. Paint a “Handsome” Kinara.
8. A Mkeka mat traditionally holds the fruits and vegetables of the harvest and is an integral part of the Kwanzaa celebration.
9. Show the students how to make a Mkeka mat using the 3 Kwanzaa colors.
10. Have a Kwanzaa party using the Mkeka mats. Serve fruits and vegetables, representing the harvest.
11. Read *Obara the Merchants* or *Obara the Gatekeeper* (African Folk Tales).
12. Have the students draw and record what they learned about the Kwanzaa celebration.

Materials

- Celebrating Winter Holidays*
- World map
- Lion Dancer: Ernie Wan’s Chinese New Year*
- Paper plates
- Scissors
- Glue
- Feathers
- Dragon Dance*
- My First Chinese New Year*
- Sequins
- Pom Poms
- Paper scraps
- Crepe paper
- Lively music
- Craft sticks
- Fortune cookies
- Streamers
- Tape
- Marker/colored pencils



Chinese New Year

1. Chinese New Year begins in late January or early February and includes outdoor parades and fireworks. The date of the Chinese New Year’s Day changes each year because it is the first day of the lunar calendar. It varies from January 21 to February 19.
2. Find China on the class world map.
3. Read *My First Chinese New Year*.
4. A lion dance is performed to scare away evil spirits and to bring good luck for the New Year. Read *Lion Dancer: Ernie Wan’s Chinese New Year*.
5. Have the students create their own lion masks to be used in the class Lion Dance.

Give each child a paper plate that has two eyeholes cut out of it. Have him color his mask; then invite him to decorate his mask by gluing on a variety of craft items, such as colorful feathers, sequins, pom poms, and paper scraps and streamers. After the glue dries, help each child tape a wide craft stick securely in place.

6. Play some lively music while the children wear their masks and perform their own versions of the Lion Dance. The children will have a roaring good time.
7. Give each child a Fortune Cookie. Put your own fortunes in them that would be more applicable for their age group.
8. Read *Dragon Dance*.
9. Have the students draw and record what they learned about the Chinese New Year celebration.

Assessment Suggestions

- Were the children able to listen to and understand the different traditions of other culture celebrations?
- Did the children listen to the stories, and were they able to relate to the information from the stories?
- Did the children play cooperatively in their small groups?
- Did the children understand and follow the rules of the games?
- Were the children engaged and on task the entire time while working in groups?
- Were the children able to locate the countries on their own world maps by looking at the class world map?
- Were they able to illustrate in their journals and express what they learned about each celebration?
- Did the children understand the character connections of the African Folk Tales?
- Were the children able to respond to the rhythm of the music while dancing?
- Were the children able to follow the rhythm of the music and sing the songs?
- Were the children able to follow directions and make the crafts on their own?

Curriculum Extensions/Adaptations/Integration

- Make Play dough Menorah.
 1. Roll out piece of play dough and press to form base.
 2. Place a large candle in center and four birthday candles on each side of the large candle.

3. Let the finished menorah dry for two or three days, then paint it in bright colors.

- Play the game Hide the Chocolate Gelt. When the children are out of the room or busy with an activity, hide the chocolate gelt around the room. Just before it's time to go home, tell the children that there is a treat hidden around the room for each of them.
- Latkes, Jelly Doughnuts, and Hanukkah Cookies are yummy Hanukkah party treats. You can buy the Jelly Doughnuts, Hanukkah cookies can be your favorite homemade cookies, and Latkes are potato pancakes.

Latkes

6-8 medium potatoes

½ medium onion

3 large eggs

¼ c. flour

Salt and pepper to taste

Using a cheese grater or food processor, grate 6-8 potatoes to yield 6 cups. Drain off the extra liquid. Grate ½ onion. Mix the grated potatoes and onion with the eggs and flour. Season with salt and pepper. Preheat oil in a skillet and drop your batter by teaspoonfuls into the hot oil. Fry until brown on the edges, then flip and fry the other side. Serve while still warm. Warm latkes and cold milk or apple sauce go really good together.

- If you have the class make Latkes, teach them the “Latkes are Frying in the Pan” song.

- Sing:

Come and Spin the Dreidel

(Tune: The More We Get Together)

Oh, come and spin the dreidel the dreidel, the dreidel,

Oh, come and spin the dreidel the dreidel, the dreidel,

You might have to give some.

Oh, Come and spin the dreidel and see what you get.

-Ada Goren

- Sing:

Hanukkah is Here!

(Tune: “Mary Had a Little Lamb”)

Let's light the menorah, menorah, menorah,

Let's light the menorah, menorah, menorah,
 One candle each joyous night, joyous night, joyous night.
 One candle each joyous night, for Hanukkah is here!
 Latkes, games, and family, family, family.
 Latkes, games, and family, for Hanukkah is here!
 Let's light the menorah, menorah, menorah.
 Let's light the menorah, for Hanukkah is here!

- Have a Kwanzaa party. Decorate room in red, black, and green. Ask a parent familiar with the holiday to assist you.
- Use a tracer to have the students make a Luciadagen crown. To make a crown, fold a nine-inch paper plate in half. Place the straight edge of the tracer on the center of the fold and trace around the rest of the shape. With the plate still folded, cut along the lines to cut out the interior shape – the candles. Next, color the wreath and the candles. Then, glue on pieces of torn tissue paper to represent leaves on the wreath and flames on the candle. When the crown is dry, fold the candles back so they stand up.
- Find a recording of the “*Mexican Hat Dance*” and teach the children a simplified version of the dance. <http://www.educatinworld.com/a-tsl/archives/99-1/lesson0018.shtml>
- Make a class created dragon. In a large open area, display a length of white bulletin-board paper. If you plan to have eight groups of students working on the project, visually divide the length of paper into seven equal sections and label each one with a different number from 1-7. On another length of bulletin-board paper, sketch a large dragon head. Label this section no. 8. Assign a small group of students to paint each section. Provide the same colors of paint for each group and encourage student creativity. When the paint has dried, cut out the dragon head and trim one end of the long paper length to resemble a dragon tail. For added interest, make a wavy cut along each side of the resulting dragon body. Then glue the dragon head to the dragon body.
- Make Chinese Lanterns. Have students draw pictures on a 12”x18” piece of construction paper. Draw a line 1” from the edge of the side of the paper opposite the fold. Then, have the students cut slits 1” apart from the fold to the line. Open up the paper. Roll with the slits running up and down and staple the ends together. To make handle punch two holes in the top of the lantern on opposite sides. Bend a pipe cleaner about 1”

from each end. Poke the pipe cleaner through the holes and twist it around itself to make a handle. Staple crepe paper streamers to the bottom. Have the student parade around the room!

Family Connections

- Send home instructions for families to make a homemade Menorah. Explain that Jewish families use a special, nine-pronged candelabra, called a menorah, to light candles every night for the eight nights of Hanukkah. The ninth candle, which stands higher than the others, is the shamash, or servant candle. It is used to light the other candles so, technically, you light two candles on the first night, three on the second night and so on). It is customary for the candles to be placed in the menorah from right to left and lit from left to right. Making a menorah from self-hardening clay is an easy, fun project for kids to try. When it is complete, set the menorah on a windowsill for all to admire. Share a variety of options for teachers to explore and use for extending learning at home.
- Make Star of David home decorations. Form a triangle with 3 Popsicle sticks and glue them together. Form another triangle the same way. Glue the two triangles together in the form of a Star of David. Draw squiggly lines on the star with glue, and sprinkle with blue glitter if you wish. Hang the stars around your home with ribbon.
- Have children will explore their family heritage. In preparation for the activity, have children ask their parents and relatives to list the countries where their ancestors were born. A large map of the world will be displayed on a bulletin board. Provide colored stickers, big enough for child's name and the name of the selected country. If you don't have enough space on the map for all the stickers, pin one large-headed thumbtack into each country and use yarn to connect each thumbtack to an index card. Staple the index cards around the border of the world map. Use a piece of yarn to connect each child's sticker to his or her index card. If you have used thumbtacks rather than stickers for any countries have each child write his or her name on the index card. Have children share with the class the information they researched.
- Ask parents to share records or tapes of African music for the children to enjoy.

- Ask families that have ties to any of the different cultures to visit the class and share some of their traditions.
- In China, each year is represented by one of 12 animals. Each animal in turn represents a positive personality characteristic that is believed to be shared by all people born in those years. Give the chart to the students to take home to familiarize themselves with the animals and to see what animal corresponds to the year that they were born. They can also have some fun finding out the years of their parents', grandparents', brothers', sisters', friends' or relatives' birthdays and determining the matching animal.

Additional Resources

Children's Books

- Eight Nights of Hanukkah*, by Judy Nayer; ISBN 0-439-69383-7
- Eight Lights for Eight Nights*, by Debbi Herman & Ann Koffsky; ISBN 10: 0764126008
- Happy Hanukkah, Biscuit!* by Alyssa Satin Capucilli; ISBN 10: 0060094699
- D is for Dreidel*, by Tanya Lee Stone; ISBN 10:0843145765
- The Colors of my Jewish Year*, by Mari Gold-Vukson; ISBN 10:1580130119
- The Borrowed Hanukkah Latkes*, by Linda Glaser; ISBN 10:0807508
- Hershel and the Hanukkah Goblin*, by Eric A. Kimmel; ISBN 10:0823411311
- The Seven Days of Kwanzaa*, by Melrose Cooper; ISBN 978-0439-5746-6
- Together for Kwanzaa*, by Juwanda G. Ford; ISBN 0-439-82959-3
- A Kwanzaa Miracle*, by Sharon Shavers Gayle; ISBN 0-439-69003-X
- My First Kwanzaa*, by Karen Katz; ISBN 10:080507077X
- The Story of Kwanzaa*, by Donna L. Washington; ISBN 10:0064462005
- Kwanzaa Fun: Great Things to Make and Do*, by Linda Robertson; ISBN 0-7534-5685-0
- Obarand the Gatekeeper*, by Michelle Bodden; ISBN 10:0975308904
- Obara the Merchants*, by Michele Bodden; ISBN 10:0975308912
- Nine Days to Christmas*, by Marie Hall Ets. & Aurora Labastida; ISBN 10:0140544429
- Dragon Dance: A Chinese New Year*, by Joan Holub; ISBN 10: 012400009
- My First Chinese New Year*, by Karen Katz; ISBN 10:0805070761
- Lion Dancer: Ernie Wan's Chinese New Year*, by Kate Waters & Martha Cooper; ISBN 10:05904304755
- Hanukkah Oh Hanukkah*, by Susan L. Roth; ISBN 10:0439908728
- Festival of Lights*, retold by Maida Silverman; ISBN 0689830831
- My First Kwanzaa Book*, by Deborah M. Newton Chocolate; ISBN 0439129265
- On the First Night of Chanukah*, by Cecily Kaiser; ISBN-10: 0439758025

Books

Another Trip Around the World, by Leland Graham, and Traci Brandon; ISBN 044222-120054

Resources for Creative Teaching in Early Childhood Education 2nd Edition, by Darlene Softley Hamilton/Bonnie Mack Flemming; ISBN 0-15-576652-X

Learning about Cultures, by John Gust, M.A. and J. Meghan McChesney; ISBN 978-1-57310-012-1

Creative Resources for the Early Childhood Classroom, by Judy Herr and Yvonne Libby Larson; ISBN 10: 1-4283-1832-1

Celebrations, by Anabel Kindersley & Barnabas Kindersley; ISBN 10:07894202

Media

Kwanzaa Fun, by Linda Robertson & Julia Pearson; ISBN 978075345685

Articles

Social Studies, the Mailbox Magazine; ISBN 10 #1-56234-645-8

Arts and Crafts, by the Education Center, Inc.; ISBN 1-56234-32-6

Sing a Song of Seasons, the Mailbox; ISBN 13: 978-156234498-6

Web sites

<http://www.childfun.com/modules>

<http://content.scholastic.com/browse/lessonplan>

<http://www.theholidayspot.com/hanukkah/>

<http://www.scholastic.com>

<http://www.enchantedlearning.com/crafts/kwanza>

<http://www.nacnet.org/assunta/nacimnto.htm>

<http://teachers.net/lessons/>

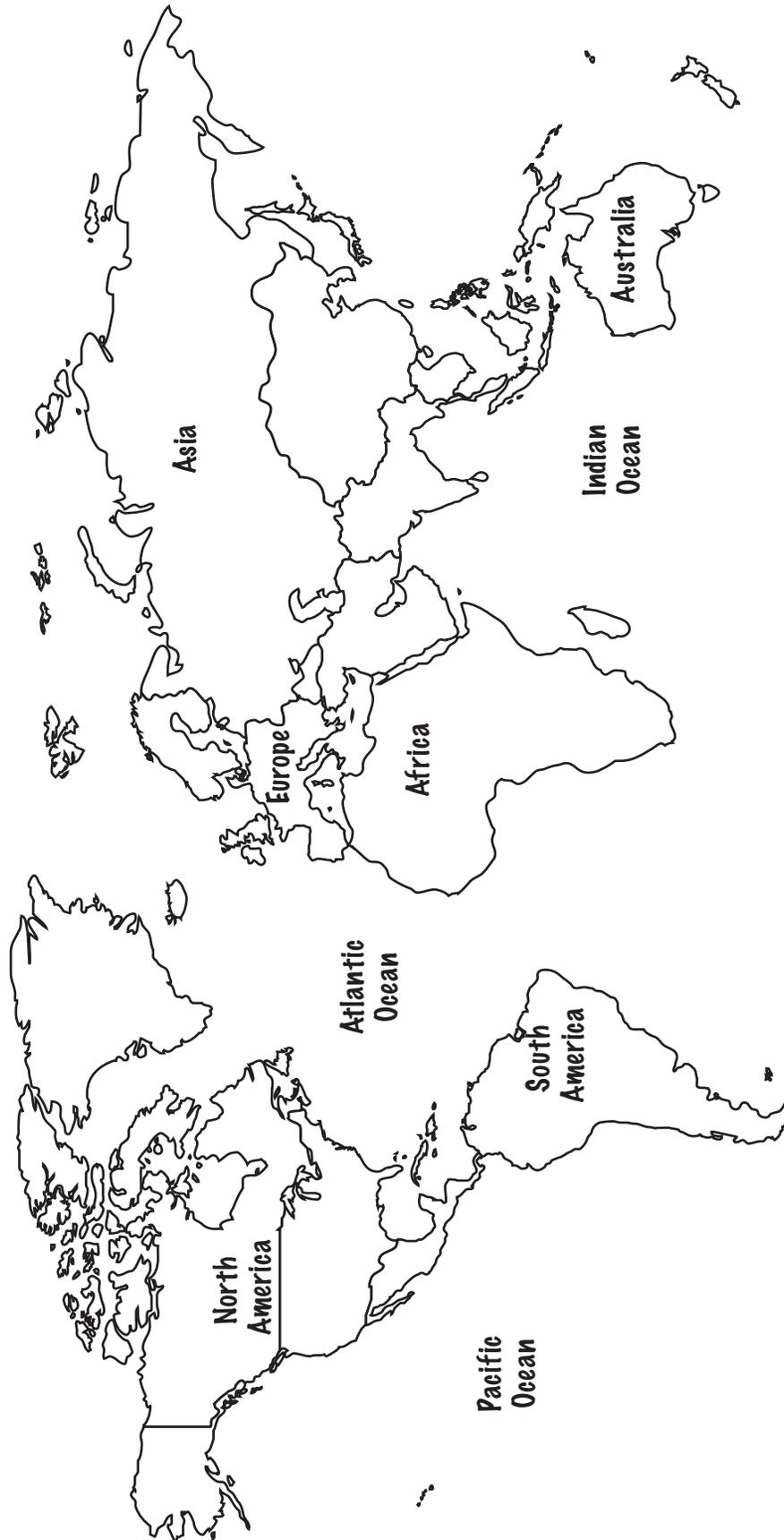
<http://www.mexonline.com/chistmas.htm>

<http://www.dltk-kinds.com/world/mexico/>

Celebrating Winter Holidays

Name _____

World Map





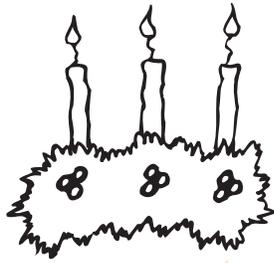
December



S	M	T	W	T	F	S

Hanukkah lasts for eight days. This year it begins on December _____
and ends on December _____.

Hanukkah



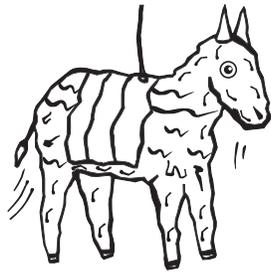
December



S	M	T	W	T	F	S

St. Lucia Day is celebrated on the same day each year. It is on December _____.

St. Lucia Day



December



S	M	T	W	T	F	S

La Posada is celebrated for nine days before Christmas. It starts on December _____ and ends on December _____.

Las Posadas



December

January

S	M	T	W	T	F	S

Kwanzaa lasts for seven days. It begins on December _____
and ends on January _____.

Kwanzaa



January

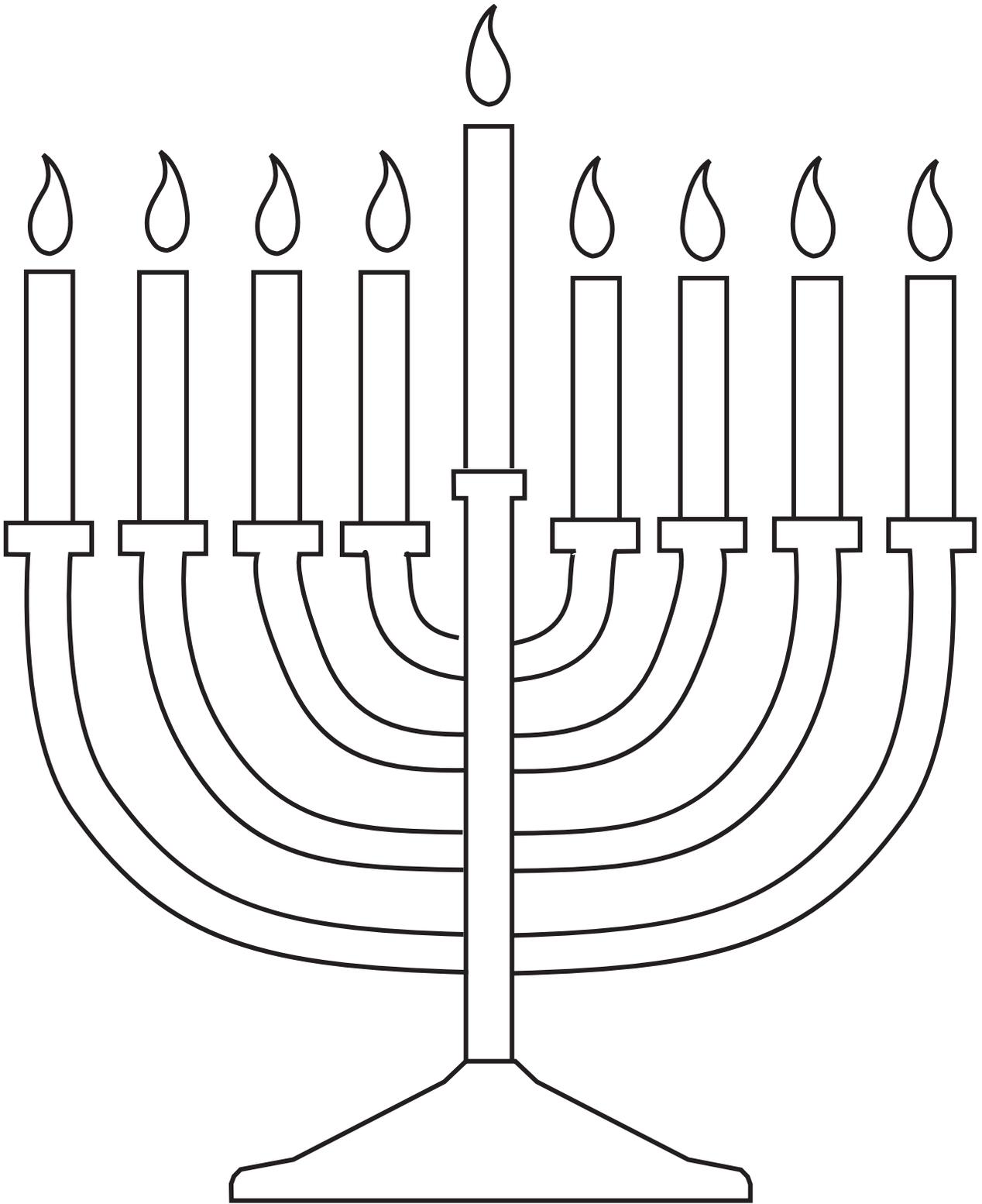
February

S	M	T	W	T	F	S

Chinese New Year varies from January _____ to February

_____.

Chinese New Year



Menorah

Tasty Menorahs Instructions

Ingredients

- Bread
- Cream cheese or butter
- Carrot Sticks
- Pretzel sticks
- Raisins

Instructions

1. Spread bread with cream cheese or butter
2. Arrange 8 pretzels as candles and carrot sticks as large candle in center.
3. Use raisins as flames at ends of carrot and pretzel sticks.

Poem: Eight Little Candles in a Row

Eight little candles in a row, waiting to join the holiday glow.
The first night we light candle number one, Hanukkah time has now begun.
The second night we light candles one & two.
Hanukkah's here--there's lots to see and do.
The fourth night we light all up to four,
Each now a part of the Hanukkah lore.
The fifth night we light all up to five, helping our Hanukkah come alive.
The sixth night we light all up to seven.
The glow of each candle reaches to heaven.
The eighth night we light all up to eight, Hanukkah's here----let's celebrate'

Song: Light the Candles Bright

(Sung to: "The Farmer in the Dell")

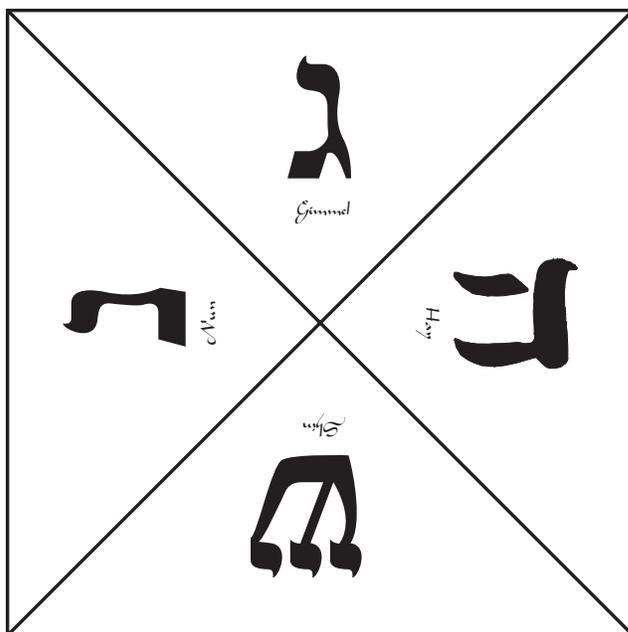
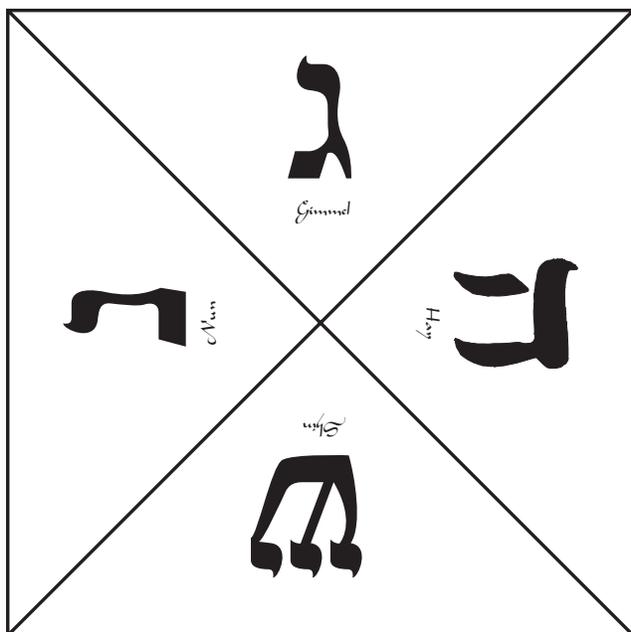
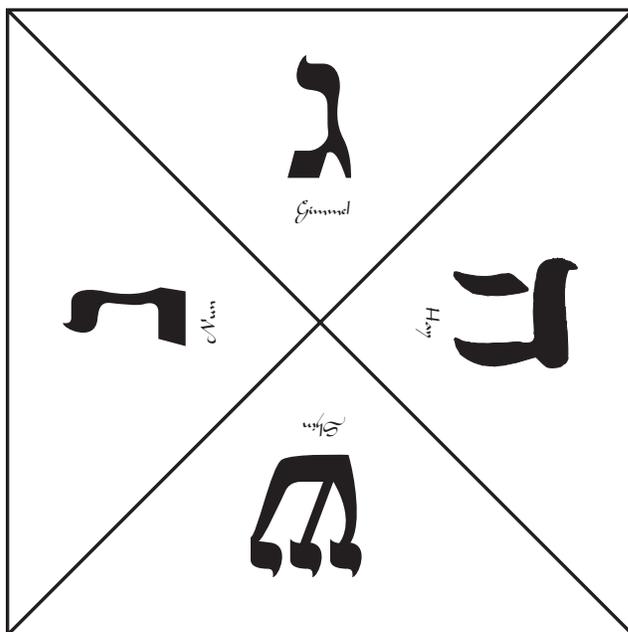
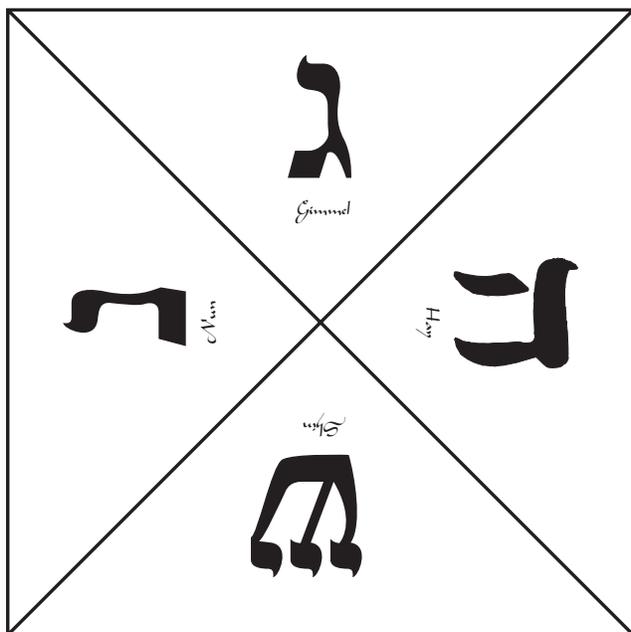
Oh, light the candles bright, and dance around the light.
Heigh-ho the derry-oh, it's Hanukkah tonight
Spin the dreidel round, and watch it falling down.
Heigh-ho the derry-oh, it's Hanukkah tonight.
Latke treats to eat, and family to greet.
Heigh-ho the derry-oh, it's Hanukkah tonight.

Dreidel Pattern

Make A Dreidel

You will need:

- Dreidel pattern
- Lightweight cardboard
- Scissors
- A short, sharpened pencil or dowel (about three inches long)
- Nuts, raisins, pennies, or whatever you want to play the game



Dreidel Game

How to Play Dreidel

- Give each player 15 pennies
- Ask each player to put two of their pennies into the center “pot”.
- Give each player a turn to spin the dreidel (like a top). The letter that’s facing up when the dreidel stops spinning tells what the player must do:
 - *Nun* – do nothing
 - *Gimmel* – take everything from the pot
 - *Hay* – take half the pot
 - *Shin* – put two pennies in the pot
- Each time the pot is emptied have the players put two more pennies in the pot.
- The game is over when a player has no more pennies.
- The winner is the one with the most pennies.

Dreidel Song - I Have a Little Dreidel

**I have a little dreidel, I made it out of clay,
And when it’s dry and ready, then dreidel I shall play,**

(Refrain)

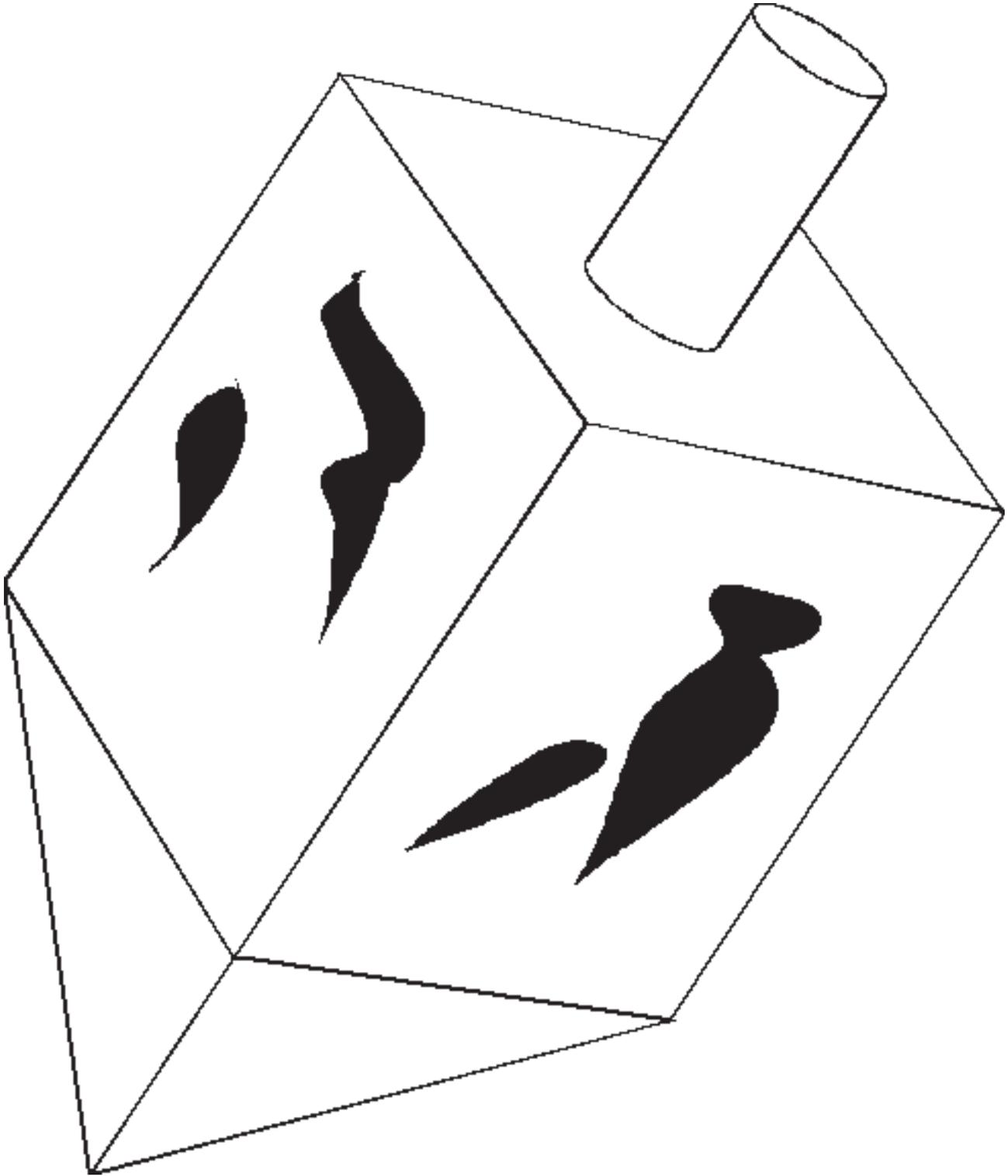
**Oh dreidel, dreidel, dreidel,
I made it out of clay;
Oh dreidel, dreidel, dreidel,
Now dreidel I shall play,**

**It has a lovely body,
With leg so short and thin,
And when it gets all tire,
It drops and then I win.**

(Refrain)

**Oh dreidel, dreidel, dreidel,
With leg so short and thin,
Oh dreidel, dreidel, dreidel,
It drops and then I win.**

Dreidel



Parent Letter

Dear Parents,

In class we have been studying winter celebrations from around the world. This week we have been talking about Hanukkah, a Jewish celebration. The children have had an opportunity to learn songs, traditions, poems, and games while talking about the Hanukkah celebration. Today the children played the Jewish traditional Dreidel game. They had so much fun playing it; I am sending home the instructions to make a dreidel and the instructions and rules of the game.

Dreidel Materials:

- Square piece of cardboard (about 4" x 4"), pencil, marker, ruler
 - Nuts, raisins, pennies, or whatever you want to play the game
1. Use the ruler to draw lines from corner to corner of the piece of cardboard, dividing the cardboard into four triangles.
 2. In each triangle, write one of the Hebrew letters.



Nun



Gimel



Hay



Shin

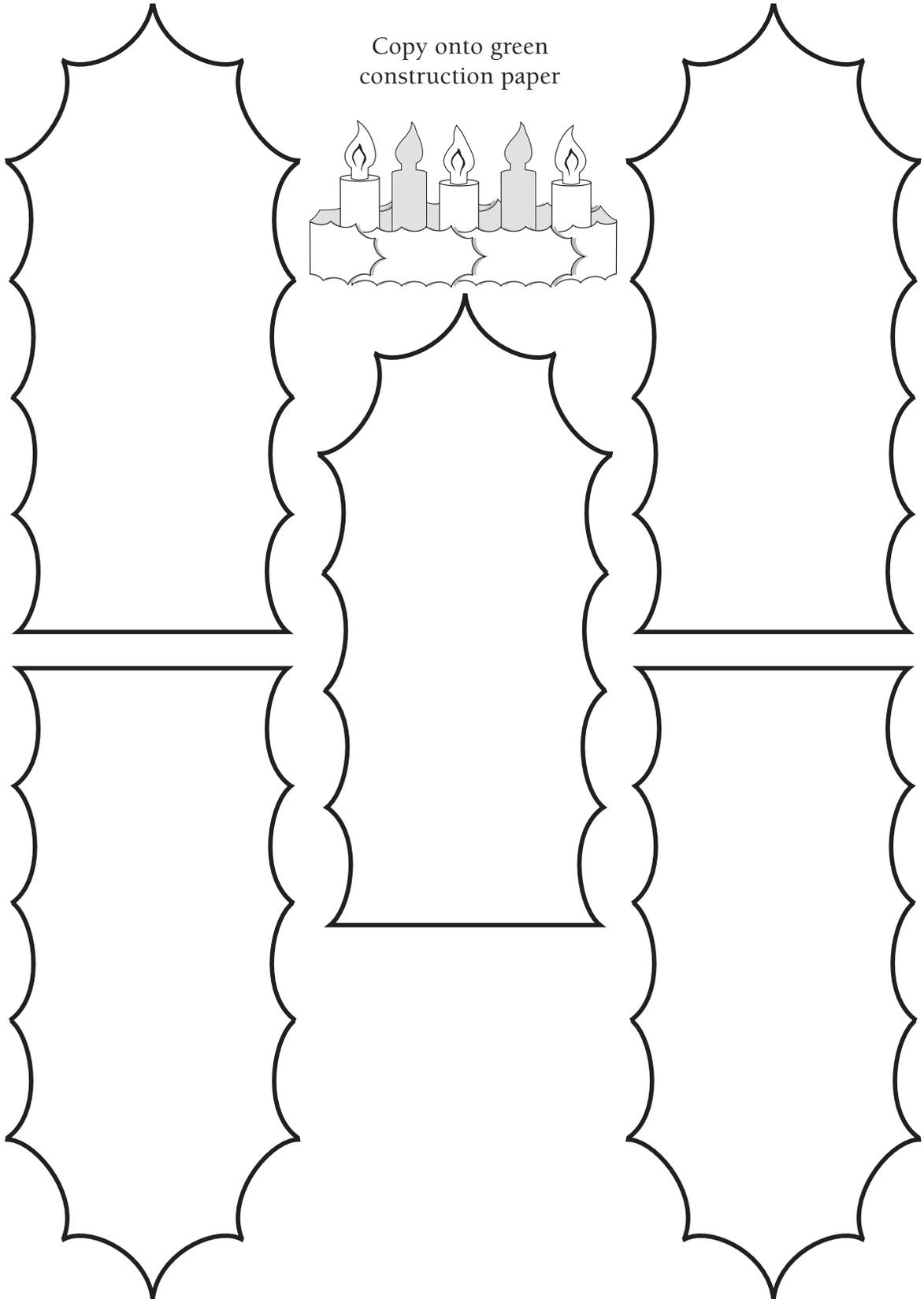
3. Poke a small hole in the center of the cardboard. Then push the pencil partway through the middle of the cardboard, letting it stick out about one inch. Spin the dreidel on the pencil point.

How to Play Dreidel

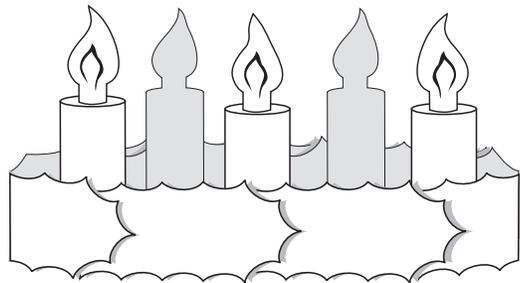
- Give each player 15 pennies.
- Ask each player to put two of their pennies into the center “pot.”
- Give each player a turn to spin the dreidel (like a top). The letter that’s facing up when the dreidel stops spinning tells what the player must do:
 - *Nun – do nothing*
 - *Gimmel – take everything from the pot*
 - *Hay – take half the pot*
 - *Shin – put two pennies in the pot*
- Each time the pot is emptied, have the players put two more pennies in the pot.
- The game is over when a player has no more pennies.
- The winner is the one with the most pennies.

Leaf Pattern

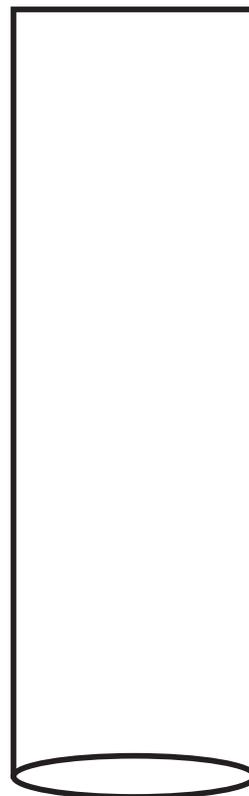
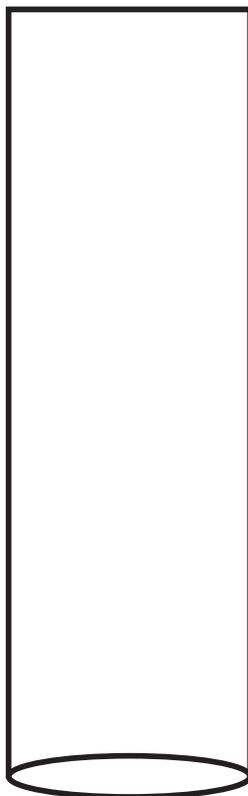
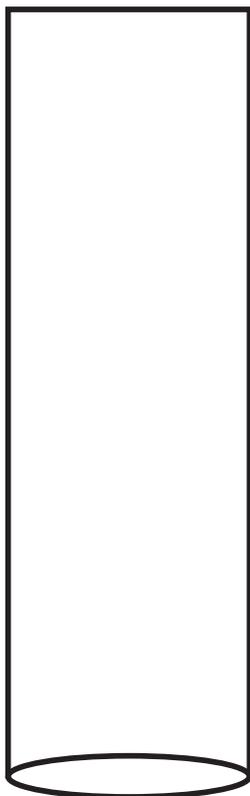
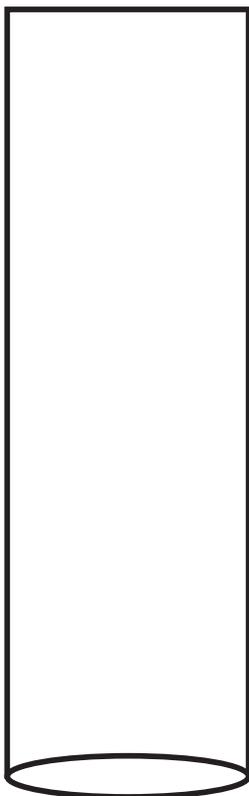
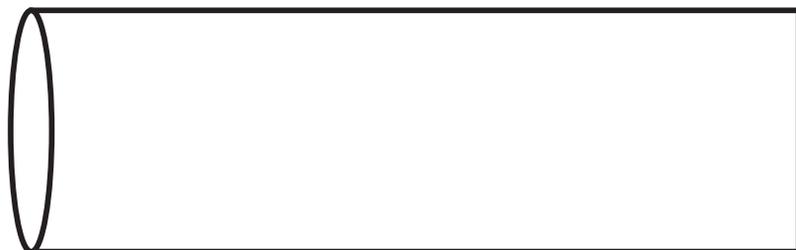
Copy onto green
construction paper



Candle Pattern

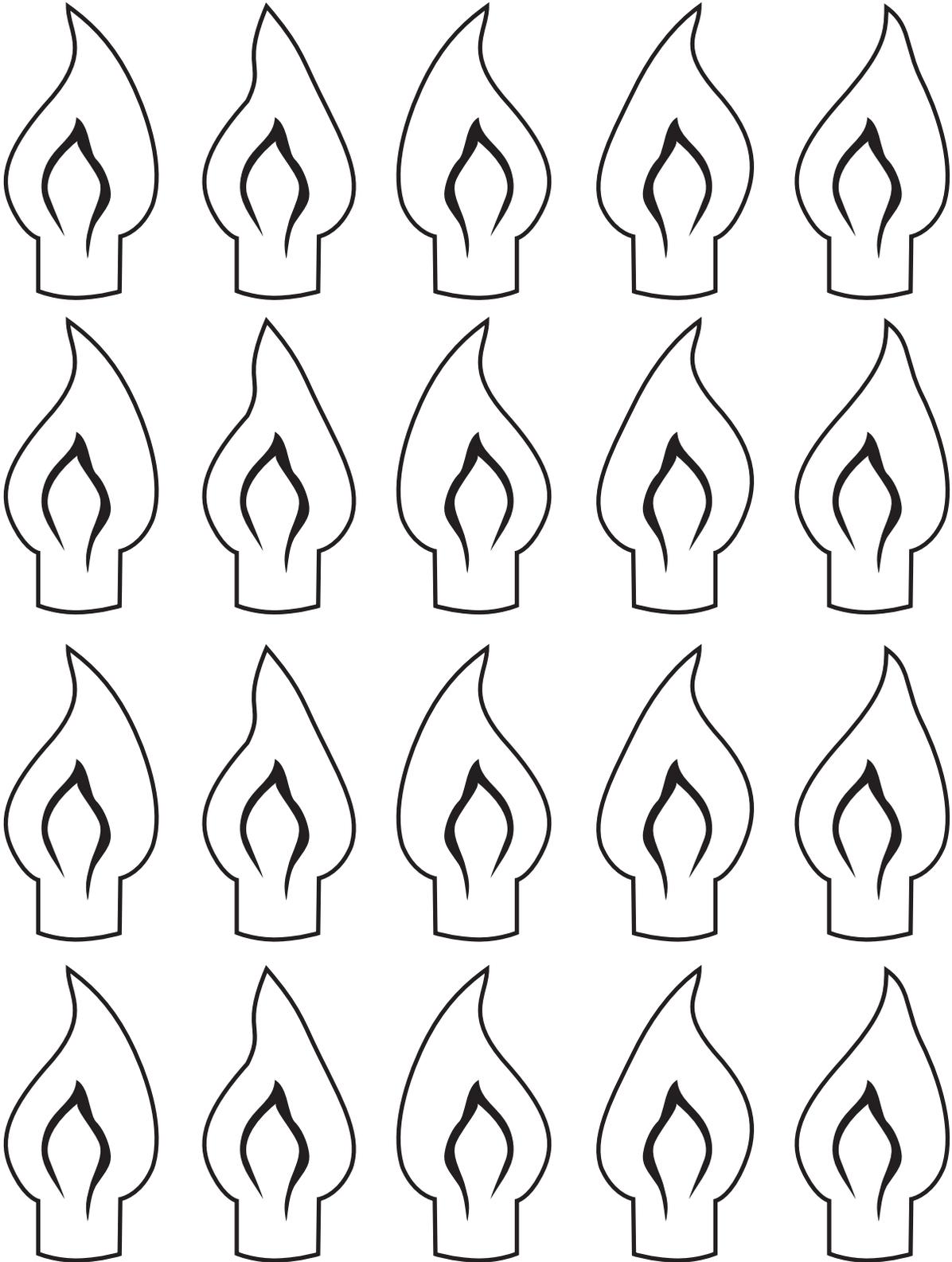


Copy onto white construction paper



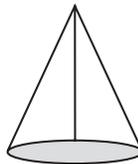
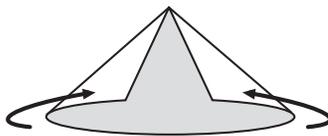
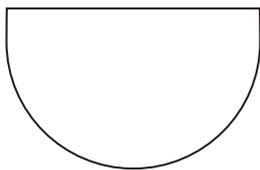
Flame Pattern

Copy onto yellow
construction paper

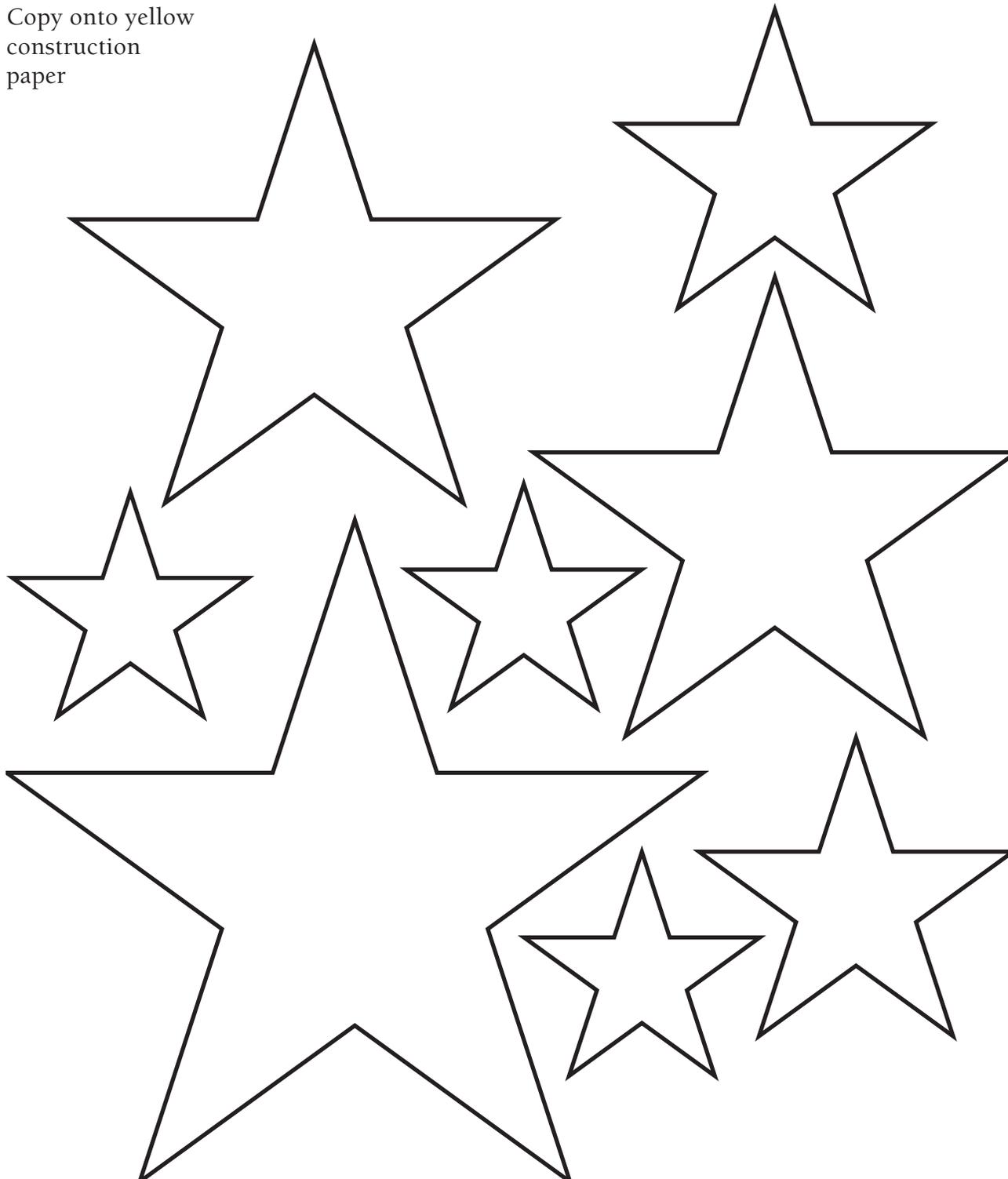


Star Pattern

White bulletin board paper - approximately 28 inches



Copy onto yellow construction paper



Kinara

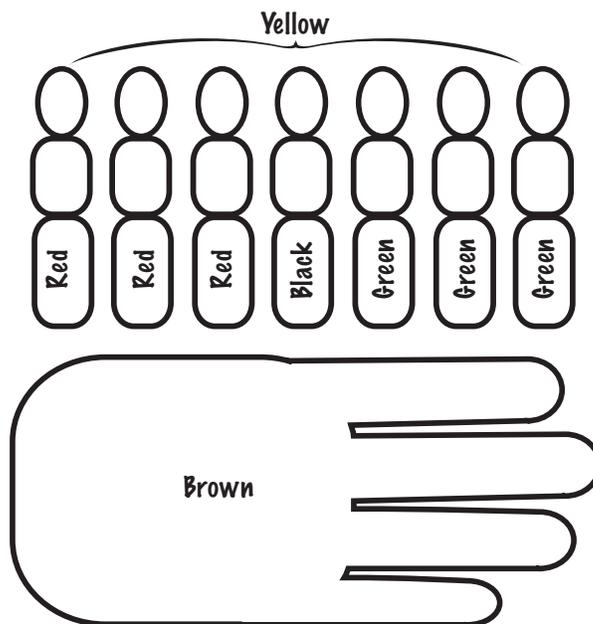


Mkeka Mat

- Fold a large piece of red construction paper.
- While the paper is folded, draw a series of lines across the fold, but do not draw the lines all the way to edge-leave about 1 inch at each edge.
- Have students will cut along the lines
- When they are finished cutting, they will unfold the pieces of paper.
- Using green and black construction paper, cut strips of paper 1 inch wide, and the same length as the height of the large piece of paper.
- Have the students weave the strips through the cuts in the large piece of paper. Make sure they alternate rows so that the strips don't fall out.
- When the weaving is done, secure each strip of woven paper using glue or tape.
- If needed trim the woven edges a bit to make the edges of the Mkeka mat even.

“Hand-some” Kinara

- Prepare shallow containers of red, black, green, yellow, and brown paint.
- Make the following paint prints:
 - Three red candles: index, middle, and ring fingers
 - One black candle: index finger
 - Three green candles: index, middle, and ring fingers
 - Yellow flames: fingertip
 - Brown kinara: palm, fingers, excluding thumb
- After the paint dries, frame it with black strips of paper.



Content III-1

Activities

Changes in Season

Exploring the Seasons

Standard III:

Students will develop an understanding of their environment.

Objective 1:

Investigate changes in the seasons.

Intended Learning Outcomes:

1. Demonstrate a positive learning attitude.
6. Communicate clearly in oral, artistic, written, and nonverbal form.

Content Connections:

Language Arts VIII-6; Write in different forms and genres
 Math III-3; Gather data about self
 Math III-2; The months of the year

*Content
 Standard
 III*

*Objective
 1*

Connections

Background Information

One of the most common misconceptions about the seasons is the idea that the seasons are a result of the varying distance of Earth from the Sun throughout the year. An easy way to see that this idea is incorrect is to remember that when it is summer in the Northern Hemisphere, it is winter in the Southern Hemisphere. The main cause of the seasons is due to the 23.5-degree tilt of Earth's rotation axis. As Earth goes around the sun, at times the Northern hemisphere is oriented more towards the sun, and at other times it is farther from the sun. When the Northern Hemisphere is oriented more towards the sun, we have our spring and summer seasons. As Earth continues to move on its revolution around the sun and the Northern Hemisphere begins to orient away from the sun, we have our autumn and winter seasons. The opposite is true for the Southern Hemisphere.

In the Northern Hemisphere, the Autumnal Equinox (a day when day and night are of equal length) occurs on or about September 21, marking the official start of autumn. Winter officially begins with the Winter Solstice, which occurs on or about December 22 of each year. This is also the shortest day of the year. The Vernal Equinox occurs on or about March 21, marking the first day of spring and another day and night of equal time. Summer officially begins on or about June 21, which is the longest day of the year and makes the Summer Solstice.

Additionally, it is often common for students to mix up seasons, months, and holidays. We want to help them begin to understand that the holidays occur in the months and that months occur in the seasons. This lesson plan can be used over the course of a school year,

covering one month's seasonal activities at a time, or as an inclusive unit completed over the course of several weeks.

Research Basis

Joshua, M., (2007). The Effects of Pictures and Prompts on the Writing of Students in Primary Grades: Action Research by Graduate Students at California State University, Northridge. *Action Teacher Education*. 29 (2) 80-93.

The researchers in this action research project wanted to examine the idea that when verbal writing prompts are accompanied by a coordinating picture, students will be more engaged in the process and therefore produce more writing containing more detail than the writing that they would produce without any visual aid. Quoting from the article, "Teachers can stimulate children to write by introducing children's literature and by relating writing to children's experiences. The teacher's role is to guide students in their topic development and to lead young writers to understand the purpose of the writing assignment and the intended audience." The researchers found that when the kindergarten students were given a verbal prompt and a visual aid, their writing quality and the number of words (and/or letters) both improved. Those at the earliest stage of emergent writing improved the most. This was particularly true for English Language Learners. Because of the limited experience of kindergarten students, visual aids appeared to provide concrete examples and therefore assisted them with their writing.

Furuness, L.B., Cohen, M.R. (1989). Children's Conception of the Seasons: A Comparison of Three Interview Techniques. *Presented at the Annual Meeting of the National Association for Research in Science Teaching*. San Francisco, CA. 2-11. ERIC.com

The authors of this paper studied and compiled research from several different sources. They discussed the idea that a child's thought process has two domains of knowledge labeled "life-world knowledge" (based on and developed from day-to-day experience) and "scientific knowledge" (created by school-centered teaching). A student's preconceived ideas of the world (e.g. the four seasons) will influence how he/she will assimilate the scientific concepts about the seasons that are taught in school. In order to successfully teach the student the correct ideas about the world around him/her (e.g., the seasons), educators must find a way to link the students existing ideas to the correct ones. Educators must take what the students already know (or what they think they know/assume) and build on it while simultaneously correcting any misconceptions.

Invitation to Learn

Provide the students with paper cutouts that represent the four seasons (e.g., a leaf for autumn, a snowflake for winter, a flower for spring, and a sun for summer.) Divide chart paper into four sections labeled autumn, winter, spring, and summer. Have each student choose which season is his/her favorite by placing a cutout in the corresponding section on the chart paper. Allow students to talk about why they chose the seasons that they did. Some students may say “fall” for “autumn.” Teach them that these words can be used interchangeably. Have students write in their classroom journals what their favorite season is and why. Write down some of their responses on chart paper for later reference.

Materials

- Seasonal cutouts
- Chart paper
- Journal
- Pencil



Instructional Procedures

Class Season Chart

1. Read *A Tree for All Seasons*. Discuss the different seasons that occur in the story and the different types of activities that were shown in the book.
2. Discuss with students the different months of the year and what months belongs to each season. Have students help decide what month belongs in what season. Pose questions about the months and the seasons. For example, July is a summer month. How does it vary from January, which is a winter month?
3. Create a Season Chart. Divide a piece of poster board into four equal sections. Label one section summer, one autumn, one spring, and one winter. In the appropriate section, write the months that fit in that season. For most of the Utah area, the weather seems to dictate that the months fit into the seasons in the following way: winter: December, January, February; spring: March, April, May; summer: June, July, August; autumn: September, October, and November. However, according to the official dates of the seasons (in accordance to summer and winter solstices and the vernal and autumnal equinox dates), it goes as follows: winter: January, February, March; spring: April, May, June; summer: July, August, September; and autumn: October, November, December. Because kindergarten students tend to follow the rule of “what you see is what you get,” you may want to adjust the months in the seasons for what works best for the area in which you teach. However, you should let your students know the first “official day” of each season.

Materials

- Poster Board
- A Tree for All Seasons*



4. Teach students the *Seasons and Months* song (to the tune of *The Farmer in the Dell*):

Season and Months

In the summer it is hot
In the summer it is hot
June, July, and August
In the summer it is hot.

In autumn the leaves fall
In autumn the leaves fall
September, October, November
In autumn the leaves fall.

In the winter it is cold
In the winter it is cold
December, January, February
In the winter it is cold.

In spring new things grow
In spring new things grow
March, April, and May
In spring new things grow.

5. As a class, discuss the various attributes of each season and write several key seasonal words in each corresponding section on the Season Chart. For example, for summer, some words could be “hot,” “sunny,” “dry,” and “longer days.” For autumn some examples are, “cooler days”, “leaves changing colors,” and “harvest time.” Descriptive winter words could be “cold,” “snowy,” and “longer nights.” Examples for spring are “snow melting,” “new things growing,” “new buds and flowers.”
6. Keep the Season Chart for use with the Season Journals that the students will be making.

Season Journals

1. Read *Around the Year*. Lead a class discussion about the different types of activities that the children in the book participate in each month and what season it is.
2. Tell the students that they will be making a Season Journal about all the different months of the year and the types of seasonal activities that they can do each month.
3. Have students color the cover page of the *My Season Journal*.
4. Show students the *Tree Outline* page and the *Writing Page* for the *My Season Journal*. For each month, they will be adding their own drawings to the *Tree Outline* page. First, they will need to color/decorate the outline of the tree appropriately for that month's season (e.g. in July the tree has leaves). Then, they will need to draw pictures of themselves (and/or friends and family) by the tree doing appropriate seasonal activities for that month.
5. Show students the *Writing Page*. Explain that they will be able to write a sentence or two about each month. Then, all those pages for each month will go into a *My Season Journal* that they will be able to take home and share with their families. When writing the sentences, take the students' writing abilities into consideration. Students who are able to write with just a little help (or independently) should be encouraged to do so. However, those who need assistance should be allowed to participate in a class sentence about each month. For each month in the *My Season Journal*, class discussion should take place in order to decide what sentence(s) will be written for that month. For example, write down several sentence ideas and then, as a class, decide what will be written. Sound the words out as a class and discuss sentence structure. Students can write with the teacher or write independently. Always have students write the name of the month in the rectangular space on top of the *Writing Page*.
6. Following are some ideas for the *Tree Outline* for each month. There are some ideas of how to decorate the tree with a variety of objects. You do not need to follow those ideas, you can have the students just color the *Tree Outline* if you would like. If you do choose to use the additional items, remember to gather together any of the items that you will need to use. Adjust as needed with your class. Remember to discuss which months belong to each season (refer to Season Chart) and discuss appropriate seasonal activities.

Materials

- Around the Year*
- My Season Journal*
- Tree Outline*
- Writing Page*
- Any of the materials that you may want to use in the Season Journals



- a. January—winter. The tree is dormant. There is snow on the ground and some piled in the tree. Use cotton balls for the snow. Students can draw a picture of themselves building a snowman, sledding, ice-skating, etc.
- b. February—winter. There is still snow on the ground. Use white paint for the snow. Draw a bird feeder on the tree and discuss helping animals during the winter. Students can draw a picture of themselves putting the bird feeder on the tree. You can make pinecone birdfeeders (see Instructional Procedure number 9) as a class for the students to take home and hang on trees in their own yards.
- c. March—spring. Maybe a patch or two of snow is left, but it is mostly gone. There are some leaf buds just starting to form on the tree. Use dried split peas for the buds. Students can draw a picture of themselves flying a kite.
- d. April—spring. There are now blossoms on the tree as well as small green leaves. Use tissue paper for the blossoms and the leaves. Flower-shaped beads could also be used. Students can draw a picture of themselves having an egg hunt.
- e. May—spring. Leaves are bigger now. Birds are building a nest in the tree. There are flowers growing by the side of the tree. Students can draw pictures of themselves picking the flowers. Use watercolors to paint the flowers.
- f. June—summer. There are baby birds in the nest in the tree. The parent birds are flying around. The leaves on the tree are now a dark green. Use green-colored masking tape, green foam, or green felt for the leaves. Students can draw a picture of themselves blowing bubbles.
- g. July—summer. There are still dark green leaves on the tree. The baby birds are flying, too. Students can draw pictures of themselves playing with sparklers or watching fireworks. Use glitter glue for the sparklers and fireworks.
- h. August—summer. Most of the leaves on the tree are still green, but there are a few that are changing color. Students can draw pictures of themselves watching the clouds. Use colored pencils or markers for the intense autumn colors.
- i. September—autumn. Most of the leaves on the tree are now red, orange, or yellow. A few have started to fall to the ground. Tear pieces of colored paper as leaves. Students can draw pictures of themselves catching the bus to school.
- j. October—autumn. Most of the leaves are on the ground. Some may be in piles. Students can draw pictures of

- themselves raking leaves or in their Halloween costumes. Sponge paint or watercolor the leaves.
- k. November—autumn. There are no leaves left on the tree. There is a light dusting of snow or frost on the ground. Use boiled Epsom salt to create the frosty effect (see Instructional Procedure number 9). Students can draw their families driving to Grandma’s house for Thanksgiving.
 - l. December—winter. Snow on the ground. Use sequins (or colored wrapping paper) and green string to decorate the tree with colored lights. Students can draw pictures of themselves caroling.
7. Here are some ideas for sentences for each month:
- a. In January it is cold and snowy. We dress warmly to play in the snow.
 - b. It is still cold in February. We can make birdfeeders to help feed the birds.
 - c. Spring starts in March. The snow starts to melt and there are buds on the trees.
 - d. Soon blossoms will begin to grow on the tree in April.
 - e. In May, the flowers are starting to grow. Everything is new and green.
 - f. In June there are lots of leaves on the trees. It is starting to get warm.
 - g. In July it is hot and sunny. We can play outside. We can watch the fireworks.
 - h. It is still sunny in August. A few of the leaves are beginning to change color.
 - i. In September, lots of leaves are changing color. We get to go back to school.
 - j. In October, it is starting to get chilly. We need to dress warmly to go trick-or-treating.
 - k. In November there is often frost on the ground.
 - l. In December it snows. We can decorate for the holidays.
8. When all the pages are finished, assemble each child’s pages into his/her Season Journal. Read the Journals with the class before sending the Journals home for the students to enjoy with their families.

9. Directions for Additional Activities in Instructional Procedure number 6:
 - a. Pinecone Birdfeeder: Have a pinecone available for each student. Tie about 8 to 12 inches of yarn or ribbon to the pinecone. Mix equal parts vegetable shortening, peanut butter, and oatmeal (or cornmeal) together. Spread the mixture over each pinecone. Roll pinecone in birdseed. Hang on a tree for the birds to enjoy. If students have peanut allergies, you can eliminate the peanut butter and just use the shortening.
 - b. Epsom Salt Painting: Boil together equal parts Epsom salt and water. Use it to “paint over” any dark paper or coloring. As it dries, it will leave a frosty look. You can also “paint” over the picture with water or watercolors and then sprinkle it with table salt.
10. Ask students again what their favorite season is and why. Have them write again in their classroom journals about their favorite season. Refer back to their responses that you wrote down earlier and see if their opinions about the seasons have changed now that they have learned more about the seasons.

Materials

- 12 gift bags
- Holiday Pictures*
- 4 seasons boxes



Seasons vs. Months vs. Holidays

1. Have a set of the *Holiday Pictures* colored and laminated and ready to use. The bags should be sized so that three of them can fit into each box. Lunch bag sized works well. Clear 15 quart storage containers work well.
2. Show students the 12 bags labeled with the names of the months. Have the students help you arrange the bags in calendar order.
3. Ask students to tell you about their favorite holidays. What time of year contains their favorite holiday in?
4. Have students help you sort the *Holiday Pictures* into the correct coordinating month bag. If appropriate, review what you have already taught the students about each holiday as the students place the pictures into the bags.
5. Once all of the *Holiday Pictures* are in the correct month bags, refer back to the Season Chart and have students help you place the month bags into the correct boxes with the season names on them.
6. Review with students which holidays are in which months and which seasons.

Assessment Suggestions

- Observe and check students' writing and drawings for developmentally appropriate work.
- Check students' work to see that the activities that they drew for each month correspond with the season.
- Read students' responses that they write in their classroom journals. Check for developmentally appropriate writing skills.

Curriculum Extensions/Adaptations/Integration

- Encourage students to write additional sentences for each month independently.
- Have students read their Season Journals to each other or peer tutor buddies.

Family Connections

- Ask parents to read over the Season Journals with their students and think of additional seasonal activities that they could do for each month.
- Encourage students to do some of the activities that they wrote about with their families.

Additional Resources

Books

A Busy Year, by Leo Lionni; ISBN 0-590-47273-9

A Tree for all Seasons (National Geographic) by Robin Bernard; ISBN 0-7922-9435-1

A Time to Keep, by Tasha Tudor; ISBN 0689811624

Around the Year, by Tasha Tudor; ISBN 0689873506

Caps, Hats, Socks, and Mittens: A Book about the Four Seasons, by Louise Borden; ISBN 0-590-44872-2

Four Puppies, by Anne Heathers; ISBN 0-307-59753-9

I Can Read About Seasons, by Robyn Supraner; ISBN 0-8167-4719-9

Let's Look at the Seasons: Summertime, by Ann Schweninger; ISBN 0-590-616746-X

My Favorite Time of Year, by Susan Pearson; ISBN 0-590-46353-5

Science Around the Year, by Janice VanCleave; ISBN 0-439-27535-0

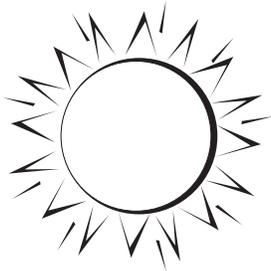
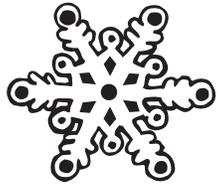
Season Song, by Marcy Barack; ISBN 0-439-50323-X

Web sites

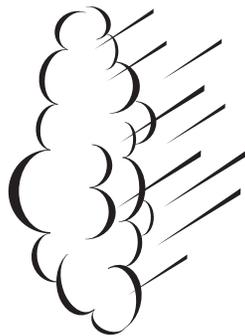
<http://www.csep10.phys.utk.edu/astr161/lect/time/seasons.html>

<http://www.enchantedlearning.com>

<http://hometown.aol.com/sail2957> (Kids Craft Recipe Factory)



My Season Journal



By _____

Tree Outline

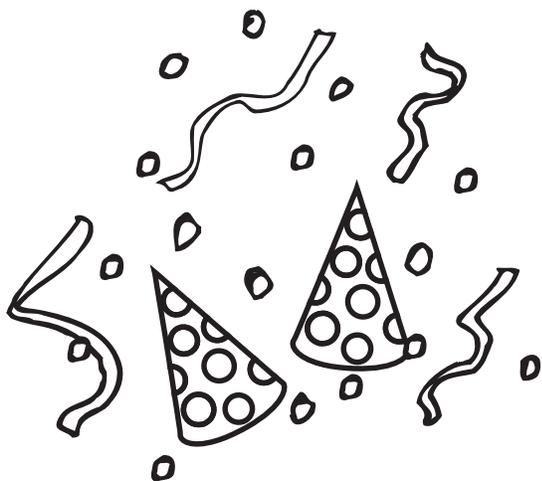


Writing Page



Handwriting practice lines consisting of four sets of three horizontal lines each. Each set includes a solid top line, a dashed middle line, and a solid bottom line, providing a guide for letter height and placement.

Holiday Pictures



New Year's Day



Martin Luther King Jr. Day

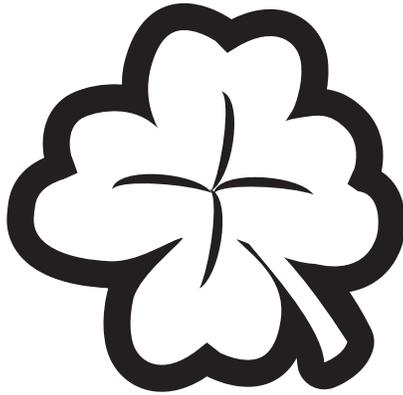


Ground Hog Day

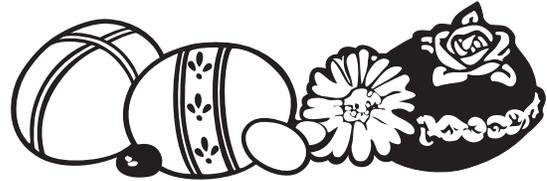


Presidents' Day

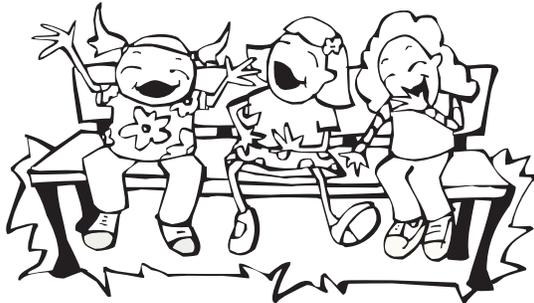
Holiday Pictures



St. Patrick's Day



Easter

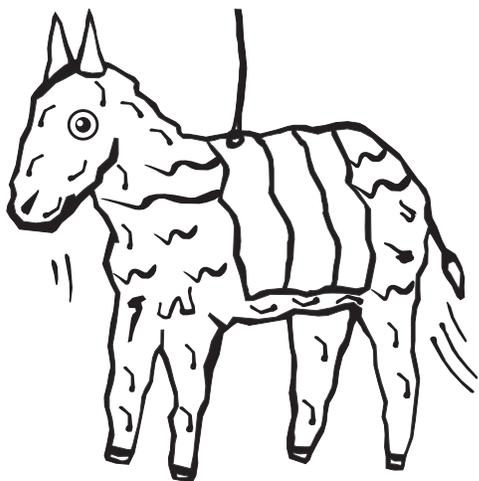


April Fool's Day



Earth Day

Holiday Pictures



Cinco De Mayo



Mother's Day

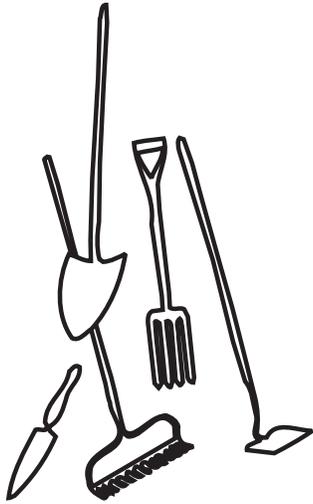


Father's Day

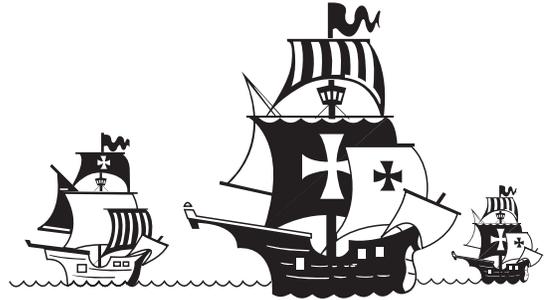


Independence Day

Holiday Pictures



Labor Day



Columbus Day



Halloween



Veterans' Day

Holiday Pictures



Thanksgiving Day



Chanukah



Christmas



Kwanzaa

Holiday Pictures

Experiencing the Weather

*Content
Standard
III*

*Objective
1*

Connections

<p>Standard III: Students will develop an understanding of their environment.</p>
<p>Objective 1: Investigate changes in the seasons.</p>
<p>Intended Learning Outcomes:</p> <ol style="list-style-type: none"> 1. Demonstrate a positive learning attitude. 5. Understand and use basic concepts and skills.
<p>Content Connections: Language Arts I-1; Following directions. Language Arts VIII-2; Make a book.</p>

Background Information

We want to make sure that we give our students correct information about what causes weather. Due to their developmental age, kindergarten students have limited abilities to understand complex ideas and theories about the weather. As early childhood educators, we need to find a way to make the concepts of weather more tangible so that our students can begin to comprehend the world around them. Remember that “weather” is the condition of the air and the atmosphere at one place at one time while “climate” is the usual weather for an area at a given time of year.

The air around Earth creates the weather. The layer of Earth’s atmosphere that is closest to Earth is called the troposphere. The troposphere is where the weather forms. The sun heats Earth’s surface unevenly. Areas around the equator are warmer than areas near the polar regions. Air moves based on high and low pressure areas. The moving air creates the winds, which, in combination with the water cycle, creates the weather. Air moves mostly in large blocks called air masses. Depending on where the air mass forms and which direction it moves, it brings with it different weather. Cold, dry air masses that form over cold land areas tend to move towards Earth’s equator. These air masses usually mean clear, dry weather. Cold and moist air masses form over the cold ocean waters. As they move towards the equator, they usually bring rain or snow with them. Warm and dry air masses form over tropical land and tend to move away from the equator. They frequently bring in hot, dry weather. Warm, moist air masses that form over warm ocean waters also have a tendency to move away from the equator. These air masses typically mean clouds and/or rain showers.

Here are some quick explanations of some of the types of weather that the students will be learning about. Naturally, there is more to it than these quick explanations, and there are many factors that affect the weather. However, these explanations should suffice for most kindergarten lessons.

Clouds: Clouds are formed from tiny droplets of water or ice crystals. As water vapor rises in the air, it cools and condenses into the droplets. A cloud is formed when there is enough water vapor that has condensed into billions of droplets or ice crystals. The varying shapes of clouds are due to the fact that clouds are formed in a variety of ways depending on air temperature and the amount of moisture in the cloud. Different types of clouds are indicative of different types of weather.

Fog: Fog is also made up of tiny droplets of water like clouds. However, fog is formed at ground level while clouds are formed higher in the sky. Fog occurs when there is calm weather during a cool night when the ground or a body of water is also cold. Because of the cool air and cold ground, water vapor in the air condenses into the tiny droplets of water near the ground (or over a body of water). The droplets of water are so small that it takes about seven trillion of them to fill one tablespoon of water.

Rain: As the sun warms bodies of water on Earth, some of the water evaporates into water vapor. This water vapor rises into the atmosphere and forms clouds as it cools down into tiny water droplets. As the water droplets bunch together, they become larger. Once the droplets become too heavy, they fall to Earth, usually as rain. There is a tiny bit of dust at the center of each raindrop because the water vapor condenses around specks of dust.

Snow: Snow is made up of ice crystals that develop when it is too cold for rain to form. When the temperature is cold enough, the water vapor in the clouds condenses into ice crystals instead of water droplets. If the temperature of the air that the ice crystals fall through remains cold enough, the crystals hit the ground as snow. Each snowflake is unique because it is formed from thousands of the ice crystals that have joined together in a unique way.

Lightning and Thunder: Lightning is formed as droplets of water or ice in cumulonimbus clouds bump and rub against each other, creating tiny electrical particles. When the charge from this bumping and rubbing becomes large enough, it creates lightning. Lightning bolts can jump between the clouds and the ground or between several clouds. Lightning in turn creates the thunder. The loud noise of thunder comes from the heat of the lightning. The sudden burst of

heat that comes with the lightning makes a powerful explosion. The sudden movement of air is what we hear as thunder.

Wind: Wind is simply moving air. As air gets warmer, it rises and colder air moves in to take its place. As the colder air warms, it also begins to rise. However, now the warmer air that moved first has cooled and moved back down. It is the exchange of cold and warm air that creates the wind. Another way to look at it is that wind is created when air flows from an area of high pressure to an area with low pressure. If there is a big difference in the high and low pressure, it creates a strong wind. If there is only a small difference in the pressure, then the result is more of a light breeze.

Rainbow: While not a type of weather in and of itself, a rainbow can be the end result of a rainstorm. Rainbows are formed when the sun comes out after a morning or evening rainstorm. You can only see a rainbow when the sun is behind you. While it looks white, (sun)light is really made up of the whole spectrum of colors. When the sun's rays hit the tiny drops of water that are in the sky after a rain shower, the drops break up the light into the colors of the rainbow. Frequently, there are 2 rainbows that appear. There is an inner bow that is usually easier to see (the primary bow) and its "double" that tends to be paler (the secondary bow). The colors are always the same red, orange, yellow, green, blue, indigo and violet, with the colors going in reverse order in the secondary bow due to a double reflection in the raindrops.

Research Basis

Bredenkamp, S. & Copple, C., (eds.) (1997) *Developmentally Appropriate Practices in Early Childhood Programs* (rev. ed). Washington DC: *National Association for the Education of Young Children*. 112, 114, 115

By kindergarten, young children have developed the ability to mentally and symbolically represent concrete objects, actions, and events. Students at this age have (or are developing) the ability to make a plan and then carry it out. Because of this ability, their activities can become more purposeful and goal-oriented. This can be applied to their understanding of science experiments. Kindergarteners can take a guess and then (sometimes with guided direction) figure out what is happening. Kindergarteners are more likely to comprehend and remember those new ideas when given the opportunity to experience new concepts, strategies, and relationships between objects, in a hands-on setting. We need to remember that although young children may have age-appropriate limits to their cognitive capabilities, they do have a vast ability to learn, think, reason, remember, and problem solve.

Church, E.B. (2003). Scientific Thinking: Step by Step. *Scholastic Early Childhood Today*. 4/2003. 35-37

There are several different skills that early childhood students should learn in order to understand scientific thinking. These include the abilities to observe, compare, sort and organize, predict, experiment, evaluate, and apply. When we give our students the opportunity to practice building these skills, we are helping them to learn process skills for understanding science as well as other subjects.

Observation is the process of looking closely without much actual doing. Kindergarteners often want to start the experiment right away. We should remind students that using observation is an important step in experiments. When students are encouraged to **compare**, they can begin to move beyond talking about what they noticed about an item and instead talk about relationships between items. **Sorting and organizing** is the processes of putting items together by recognizable traits. Students' should be encouraged to match, group, and organize items in many different ways. In this way, they begin to understand that some objects can belong to more than one group. When students are encouraged to **predict**, they practice building questioning and speculating skills. Students learn to use prior knowledge and information gained from observation, comparing, and sorting to make the best guess that they can as to what may or may not happen in a science experiment. Student's prediction skills will get better and better with experience. During an **experiment**, students can test their predictions and try out their ideas. Students need to be given ample time and provided with plenty of materials to experiment. One way for students to **evaluate** is by letting them take their concrete experience and communicate their findings to others. They can do this verbally or be given the opportunity to write it down in journals. They can also abstractly represent their finds through graphs, drawings, and charts. The last skill is for students to learn how to **apply** what they learned to other experiments. Students can be given new materials and new questions to answer. This is also a good time for open-ended questions.

Invitation to Learn

Tell the students that they get to be scientists. As a class, they will be conducting a number of science experiments as they learn about the weather. In addition, they will have the chance to make a science book about the weather. Because it is a science book, they will need to make sure that they do their best work and make it “real”. Show some examples of science-type books if needed.

Instructional Procedures

Materials

- What Will the Weather be Like Today?*
- My Weather Book*
- Prism, flashlight
- Construction paper
- Crayons
- Wax-coated Sand
- Cotton Balls
- Water bottle
- Hot water
- Ice cubes
- Wax paper
- Aluminum foil
- Fake snow
- Hot plate
- Pot of water
- Pie tin
- Bubble solution
- Bubble wands
- Paper fan
- Windmill Outline*
- Brads
- Fluorescent light bulb
- Rubber balloon
- Paper sack



1. For each page in the weather book that the students will be making, talk about the different properties of each type of weather. Do the coordinating science experiment or sand and water activity. Through each experiment, ask students questions about what is happening and have them explain it in their own words. Demonstrate to the students how to create each page. Always discuss with your students the different types of activities that the students can do in each type of weather (e.g., fly a kite when it is windy). Discuss safe behavior for each type of weather. Collect the pages as students finish each one and compile all pages together in book form.
2. *My Weather Book*—Cover page with rainbow. Discuss how the cover of a book always has the title, the author’s name, and the illustrator’s name. Because the students will be writing the book and doing the illustrations, just their name will be on the cover. Explain to students how rainbows are formed. Ask students to very carefully color the rainbow in the correct rainbow color order. Have them write their names on the cover.

Teacher-Directed Coordinating Science Experiment: Show the students a prism and ask them to imagine that the prism is a raindrop. Use a flashlight to represent the sun. Dim the lights in the classroom. Shine the flashlight through the prism and find the resulting rainbow.

3. *Sunny and Warm*—Discuss with the students all of the different activities that they can do when the weather is warm and sunny. Some ideas are: bike riding, swimming, hiking, visiting the playground, going to the beach, etc. Make sure to explain that it can be sunny and cold, like in the winter, but for this page in the Weather Book that they are making they are focusing on warm and sunny weather. Using the light blue construction paper and construction paper crayons, have student draw a picture of themselves doing one of the activities that the class discussed. Have students label the page “Sunny and Warm”.

Coordinating Sand and Water Table Activity: Put wax-coated sand (such as Delta Sand or Moon Sand) in the sand and water table and have the students pretend that they are at the beach by building sandcastles, etc.

4. *Clouds*—Discuss with the students how clouds are formed. Have students break up cotton balls so they appear cloud-like

and glue them onto blue construction paper. Have students label the page “Cloudy”.

Teacher Directed Coordinating Science Experiment: Fill a clear plastic water bottle with very hot water. Let it sit for about five minutes to make sure that the bottle gets warm as well. Pour out about half of the water. Place an ice cube on the opening of the bottle. Put the bottle in front of a sheet of black construction paper. Watch for the formation of “clouds” on the inside of the bottle’s surface. Ask students to help you explain what happened (the evaporated water rose up and then cooled down and condensed into the water droplets that created the “cloud” in the bottle).

5. Fog—Discuss with students how fog is formed. Remind them that it is like having a cloud near the ground. Have student draw a picture on the light gray construction paper with construction paper crayons of either a car with its lights on or the seashore with a lighthouse. Label picture “Foggy”. Have students tear strips of wax paper and glue the strips over their pictures to represent fog. Remind students of the experiment that you did for clouds and how it is similar to fog.
6. Rain—Teach students about the water cycle and why it rains. Using the light gray paper, have student draw dark rain clouds. Give students a small piece of aluminum foil. Have them cut raindrop-shaped pieces of foil and glue the pieces under the rain clouds that they drew. Label page “Rainy.”

Teacher Directed Coordinating Science Experiment: Tell students that you are going to make it rain (just a little) in the classroom. They will need to use their imaginations. Show students the hot plate, the pot of water, and the pie dish that is filled with ice. The hot plate represents the sun. The pot of water represents a lake, an ocean, a stream, or a puddle. The pie dish filled with ice represents the cold clouds. Start heating the pot of water on the hot plate (remember not to let students get too close). As the steam starts to rise, explain to students that this is the evaporated water (or water vapor) that goes up into the sky and forms the clouds. Place the pie dish over the pot of boiling water. In a few moments, show students how the water is condensing on the bottom of the dish. Explain that as water vapor cools down in the clouds it condenses back into drops of water. As more steam condenses on the bottom of the pie dish, the droplets will get larger and heavier and soon will fall off the pie dish as “raindrops”. Show students as this

happens. Explain that the water cycle happens over and over again.

7. Snow—Explain to students how snow is formed the same way as rain, except it is frozen. Have students tear small pieces of the white construction paper to create a snow picture on the blue construction paper. They may draw pictures of themselves in the picture as well. Possibilities for pictures include building a snowman, sledding, skiing, ice-skating, etc. They have to tear the white paper to make the snowman, snowflakes, and piles of snow. Have students label their picture “Snowy”.

Coordinating Sand and Water Table Activity: Put mixed up fake snow (such as Super Snow or Insta Sno) in the sand and water table for students to play with.

8. Wind—Explain to students how wind is formed. Remember to tell them that while we cannot actually see the wind, we can see what the wind does. For example, we can see how the wind bends the branches of trees and how it helps us fly a kite. But the actual wind itself cannot be seen. Show students the *Windmill Outline* and brad and demonstrate how to assemble it. Have students glue the windmill building on a piece of blue construction paper and attach the blade with a brad so it will spin around. Label page “Windy.”

Coordinating Sand and Water Table Activity: Fill sand and water table with bubble solution. Provide students with bubble wands of varying sizes. As they blow bubbles, ask them to pay attention to which way they blow the bubbles. Their blowing is similar to the wind; the direction in which they blow causes the bubbles to go different directions. Use a small hand-held fan or paper fan to redirect the direction of the bubbles as the wind would.

9. Lightning and Thunder—Explain how lightning and thunder are formed. Clarify that you see lightning but you hear thunder. Discuss with students how to be safe during a violent storm. Search the Internet for lightning pictures or video clips to show the students. Have students draw a picture of their house with a thunder and lightning storm on black construction paper. Use the construction paper crayons or dark paper colored pencils for intense colors. Label paper “Lightning and Thunder.”

Teacher-Directed Coordinating Science Experiments: To make “lightning” in your classroom, turn off the lights in the classroom. Rub a blown-up balloon on your hair for a few

seconds. Hold the balloon near the end of a fluorescent light bulb. The light bulb will briefly illuminate. Why? Once you have rubbed the balloon on your hair, the balloon gets an electrical charge on it. When the balloon touches the end of the light bulb, the charge jumps from the balloon to the bulb. That is what illuminates the light bulb. Lightning is an electrical discharge in a thunderstorm. When the voltage becomes strong enough, the electricity leaps across the air from one place to another, and we see lightning. To make “thunder” in your classroom, blow up a paper sack. Twist the end tight and hold it in one hand. Use your free hand to quickly hit the bottom of the sack. The sack will burst with a loud “pop”. Remember that when lightning strikes, it heats the air around it. The hot air expands and produces waves of air that make the loud sound. Similarly, hitting the blown up sack causes the air inside the bag to compress so fast that the pressure breaks the bag. The air in the bag rushes out and pushes the air around the outside of the bag away, resulting in the “popping” sound that you hear.

10. Collect and assemble all of the students’ pages into book form for them to take home and enjoy with their families.

Assessment Suggestions

- Check students’ weather books for understanding of each weather concept.
- Have students verbally explain to you about each weather concept.
- As students are participating in each experiment, question them for understanding.

Curriculum Extensions/Adaptations/Integration

- Add extra pages to the weather book about weather that we may not experience as much in Utah, (e.g., tornado, hurricane, etc).
- Invite students to read their books to peer reading buddies, parent volunteers, other school personnel, or a sibling’s teacher.
- Assemble a book of photos of students playing, in different weather. Show safe things to do in different types of weather, such as what to do during lightning storms.

- Have students write in their classroom journals about different types of weather.

Family Connections

- Ask students to read their books to their families.
- Ask students to look with their families on-line, in newspapers, or in magazines for pictures relating to the weather.

Additional Resources

Books

Can it Rain Cats and Dogs?: Questions and Answers about Weather, by Melvin and Gilda Berger; ISBN 0-590-13083-8

Franklin and the Thunderstorm, by Paulette Bourgeois; ISBN 0-590-02635-6

Scholastic Atlas of Weather, by QA International; ISBN 0-439-67865-X

Scholastic Science Emergent Readers: Sun, by Susan Canizars; ISBN 0-590-10731-3

Scholastic Science Emergent Readers: Water, by Susan Canizars; ISBN 0-590-10727-5

Scholastic Science Emergent Readers: Weather, by Pamela Chanko; ISBN 0-590-10730-5

Scholastic Science Emergent Readers: Wind, by Susan Canizars; ISBN 0-590-10726-7

Scholastic Science Readers: Thunder and Lightning, by Wendy Pfeffer; ISBN 0-439-26988-1

Scholastic Science Readers: Tornadoes, by Brian Cassie; ISBN 0-439-26990-3

Snow? Let's Go!, by Karen Berman Nagel; ISBN 0-439-09906-4

Super Storms, by Seymour Simon; ISBN 0-439-46685-7

The Best Book of Weather, by Simon Adams; ISBN 0-7534-5584-6

The Magic School Bus Kicks up a Storm, by Joanna Cole and Bruce Degan; ISBN 0-439-10275-8

Weather: A National Geographic Action Book, by Tom Kierein; ISBN 0-7922-2782-4

Weather Words and What They Mean, by Gail Gibbons; ISBN 0-590-44408-5

Welcome Books: Cold Days, by Jennifer S. Burke; ISBN 0-516-23870-1

Welcome Books: Rainy Days, by Jennifer S. Burke; ISBN 0-516-23869-8

Welcome Books: Windy Days, by Jennifer S. Burke; ISBN 0-516-23868-X

What Will the Weather be Like Today?, by Paul Rogers; ISBN 0-590-72617-X

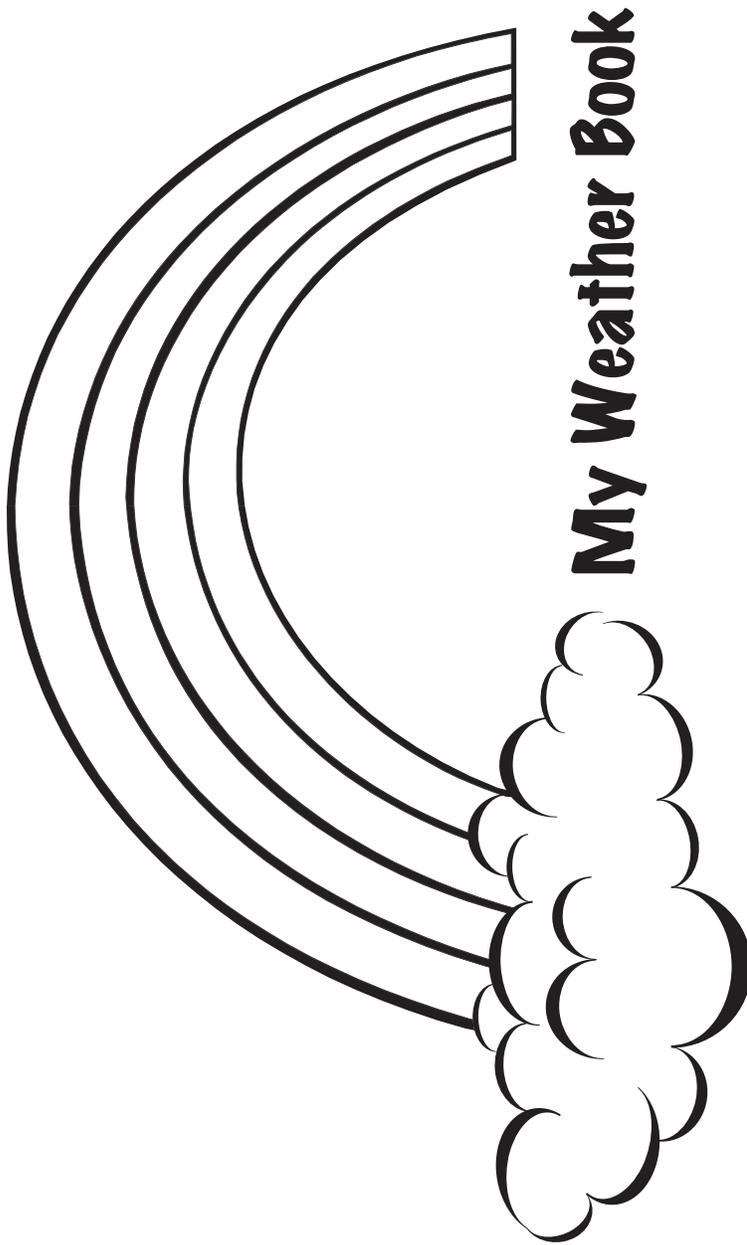
World Book Encyclopedia, by Field Enterprises Educational Corporation; ISBN 0-7166-0073-0

Web sites

<http://www.WeatherBug.com>

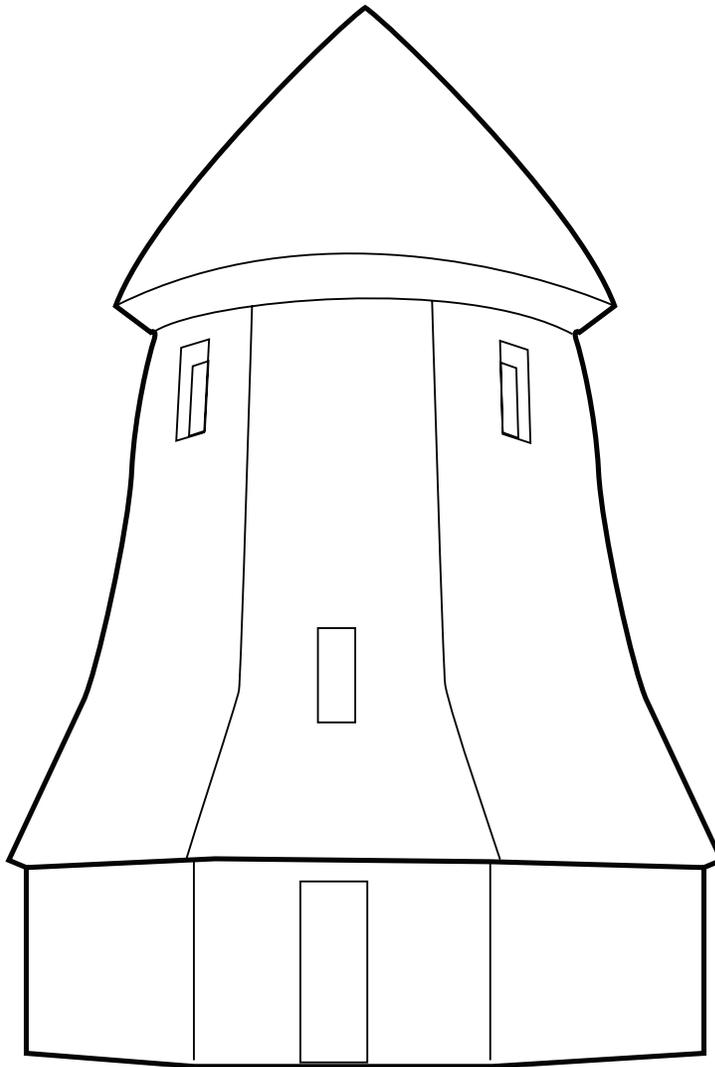
<http://science.howstuffworks.com>

<http://www.weatherwizkids.com>

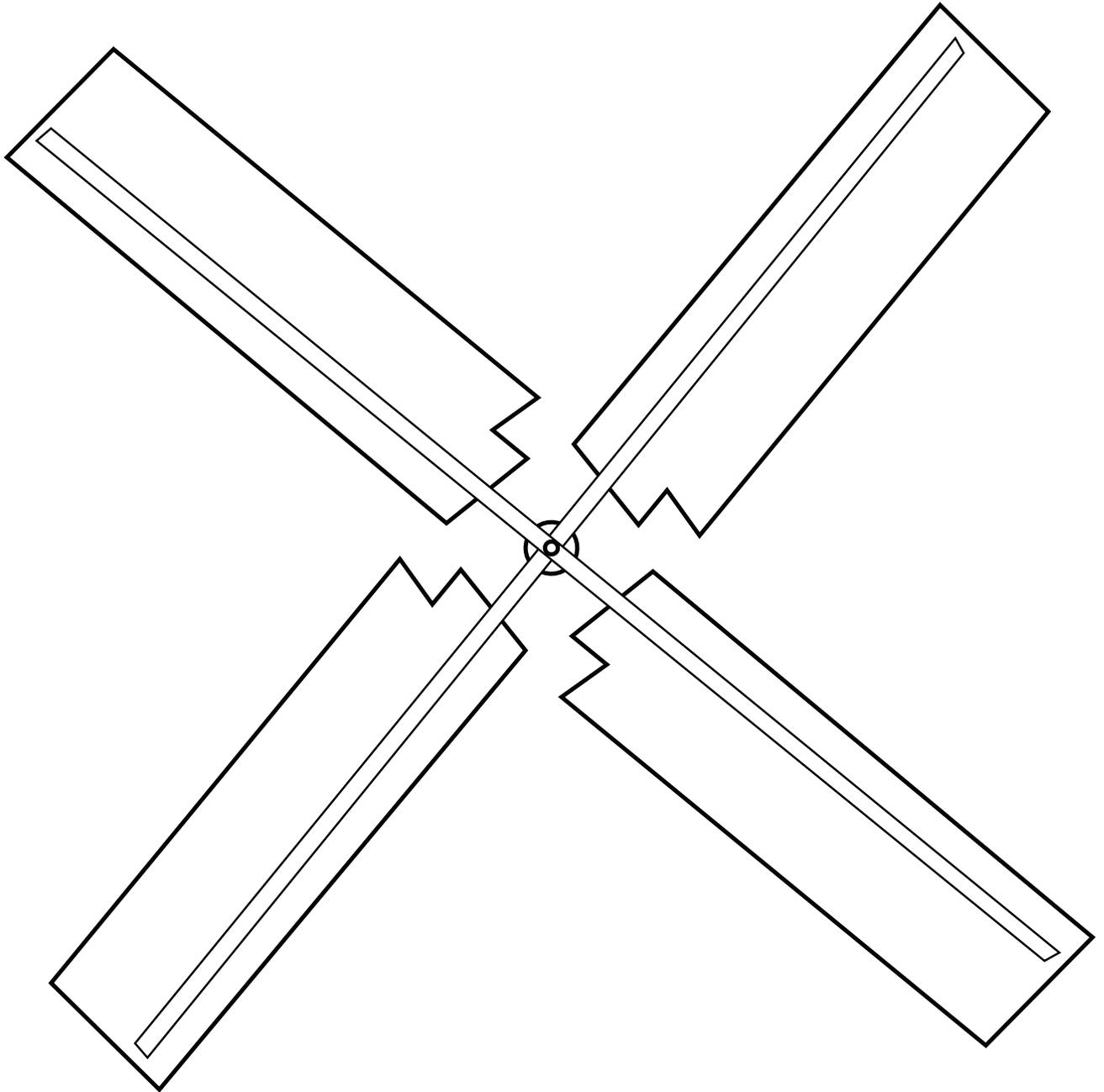


BY _____

Windmill Outline



Windmill Blade





Math II-2

Activities

Basic Patterns

A Year of Growing Patterns

Standard II:

Students will sort and classify objects as well as recognize and create simple patterns.

Objective 2:

Identify, duplicate, describe, and extend simple repeating and growing patterns.

Intended Learning Outcomes:

2. Develop social skills and ethical responsibility.
5. Understand and use basic concepts and skills.
6. Communicate clearly in oral, artistic, written, and nonverbal form.

Content Connections:

Content III-1; Describe how people change when seasons change
Language Arts VII-2; Make predictions using text

Math
Standard
II

Objective
2

Connections

Background Information

“John A. Adam says the beauty of nature is revealed by mathematics and the beauty of mathematics is revealed in nature.... Many mathematicians and scientists consider mathematics to be the science of patterns. It is a way for the invisible world to become visible” (Waters, Jen. 8/11/2005. Math, naturally. *The Washington Times*. 0732-8494).

Patterns are found throughout nature, and consequently found all through music and writing. Repeating patterns are quite common, but growing patterns are much more difficult to identify and re-create.

Repeating pattern—a sequence of items repeated over and over without change; it can be repeated and predicted infinitely, (e.g., *ababab*, or *aabbccaabbcc*).

Growing pattern—a sequence of items that repeats, but which decreases or increases with a constant amount. It can also be repeated and predicted infinitely. (e.g., *ababbabbbabbbb* or *aababcabcd*)

Growing patterns are really quite popular in literacy, especially children’s books and songs. As children learn to recognize patterns in all things around them, they are able to make connections between the things they learn and the everyday world. Just as they may recognize a simple repeating pattern, it is important for them to identify growing patterns, as growing patterns are the basis of algebraic reasoning.

One story that blatantly contains a growing pattern amidst its text is the classic tale of *There Was an Old Woman or I Know an Old Lady*. With the fly, followed by the spider, and then repeating the fly once

more, ending with the horse followed back down to the fly again, it is evident that the original item increased by one each time, but repeating the previous items in declining sequence.

This growing pattern is seen in other well-known stories/songs such as *The Twelve Days of Christmas*, *This Is the House That Jack Built*, *A-Tooty-Ta*, and *Old MacDonald Had a Farm*. In this activity, we will explore different texts with growing patterns that can be used throughout the year in conjunction with seasonal and/or holiday themes.

Before beginning to teach the following lessons, introduce growing patterns to students (see *Additional Resources* for ideas on teaching the basics of growing patterns). After they have at least a basic understanding of growing patterns (in the mathematical/geometric/numeric sense), tell students you will now be looking for growing patterns in books and songs.

Research Basis

Sutton, J., and Krueger, A. (2002). How does integrated instruction in mathematics affect teaching and learning? *EdThoughts: What we know about mathematics teaching and learning*. 56.

Mathematics need to be taught in a context that connects it to the real world. If it is taught in a strict academic environment, students are not able to build deep understandings and connections to the world around them. “Through classrooms that provide rich problem situations as a vehicle for learning mathematics, students develop a flexible understanding of the disciplines and learn to integrate content and process strands of mathematics, learning when, how and why to use their knowledge to solve unfamiliar problems.”

Annenberg Media. (2007). Defining reasoning and proof: growing patterns. *Teaching Math, Grades K-2*. http://www.learner.org/channel/courses/teachingmath/gradesk_2/session_04/section_03_e.html.

“Kindergarteners reinforce their understanding and ability to reason about counting numbers through examples of growing patterns.... A great deal of reasoning is occurring in this activity. The children begin by describing the pattern and extending it with physical materials. They make conjectures about the pattern and predict the number of tiles in elements that come later in the series. Finally, they make generalization about [what is needed for any place in the sequence], based on the patterns they have discovered. Throughout the...activity, the children explain their reasoning.”

Invitation to Learn

Have the students create a growing pattern using the markers and paper in the center of the table. Tell them if they don't know what a growing pattern is, give their best guess and if necessary, "Ask three before me!"

Tell the students to think about what they know about growing patterns, and ask if they can think of any examples (without looking at other parts of this lesson) of any growing patterns in books or songs.

Instructional Procedures

September

1. Quickly review growing patterns.
2. Read the story, *There Was an Old Lady Who Swallowed a Fly*, by Simms Taback.
 - a) The first time, read all the little comments by the other characters, pointing out all the rhyming words.
 - b) The second time, have the students read along and recite the repeating pattern phrases in the story.
 - c) You can even make up masks for each of the characters (*There Was an Old Lady Who Swallowed a Fly Character Masks*) for the students to act out the story while the story is read.
 - d) When finished, list the elements of the story in correct order. Then list them all again, but in the repeating, growing pattern.
 - e) Read the last page from the book that has the complete sequence again, checking to make sure that all the elements are right, also making certain that the students join with you to reinforce the pattern.
 - f) Place manipulatives (pattern blocks, UNIFIX cubes, stackers, etc.) in centers where small groups can use them to recreate the story. Pull a small group and recreate the pattern on a board using different shapes and colors. You be the "fly" and have the student be the "spider". Have the student draw his/her shape next to yours, then draw your shape above the subsequent character from the story. Continue in like manner through the rest of the story.
3. Tell the students that you are now going to sing a song that has a growing pattern in it. Tell them it has some actions

Materials

- Markers
- Journals



Materials

- There Was an Old Lady Who Swallowed a Fly*
- Various Character Masks.*
- Board or chart
- Markers
- Dr. Jean & Friends CD*
- Tooty Ta Lyrics*
- The Deep Blue Sea*



that they need to follow along with in order to complete the pattern. Then sing Dr. Jean’s *Tooty Ta* with the students. When finished, see if they can do the last phrase in order again, repeating the concluding section of the growing pattern.

4. A great book about growing patterns, to use when you teach about colors is *The Deep Blue Sea* by Audrey Wood. Have the students re-create this story in their own way or copy the final picture into a journal. (We will visit this more in Activity #2.)

Materials

- The Little Old Lady Who Was Not Afraid of Anything*
- There Was An Old Woman Who Swallowed a Bat*
- Large shoes
- Pants
- Shirt
- Gloves
- Pumpkin
- Drum
- Tambourine
- Shakers
- Cymbals
- Rhythm sticks
- Journal
- Halloween stickers



October

1. There are two great stories for October, *The Little Old Lady Who Was Not Afraid of Anything*, and *There Was An Old Woman Who Swallowed a Bat*.
2. If you choose to use *The Little Old Lady Who Was Not Afraid of Anything*, then it would be a great kinesthetic activity for students, or it can easily be acted-out in a “play” by the students as the elements of the repeating pattern are simple to follow.
 - a. This is an exciting one to use with simple musical instruments to represent each of the items in the story: a drum for the shoes (stomp, stomp), a tambourine for the pants (wiggle, wiggle), shakers (castanets, egg shakers, maracas, etc.) for the shirt (shake, shake), cymbals for the gloves (clap, clap), rhythm sticks for the head (nod, nod), and all the kids can shout “Boo Boo” for the head.
 - b. This activity is also easily adapted for students who are shy and don’t want to talk, but may be willing to “perform”—especially ESL students. It is also good for those who may not show their skills through “paper and pencil,” but can demonstrate understanding more easily through performance.
3. *There was an Old Lady Who Swallowed a Bat* can be expanded by discussing other “Halloween” characters/symbols she could have swallowed. Also have the students create a growing pattern in their journal using Halloween stamps or stickers representing what she ate in the book.

Materials

- There Was An Old Woman Who Swallowed a Pie*
- Shoes From Grandpa*



November

1. *There Was An Old Woman Who Swallowed a Pie* is a great story for Thanksgiving. One element to use for this story, now that they may be more familiar with the patterning and way the

previous “Old Woman” stories go, is to have them predict what the “old woman” will swallow next.

2. For those who follow the *Houghton-Mifflin* reading program, *Shoes From Grandpa* is included in Unit Four: Family. This is another great story to use for growing patterns, especially as November/December is usually when you are talking about families.

December

1. In December, either of these books can be used to demonstrate growing patterns: *There Was An Old Lady Who Swallowed a Bell* or *The Twelve Days of Christmas*.
2. With *The Twelve Days of Christmas*, many other curriculum areas can be integrated, such as music, art, and writing.
 - a. You can play the song for the students and then have them sing along, which the kids really enjoy.
 - b. Also, you can have students illustrate a class book, *Twelve Days of Christmas Book*, to go along with the song, having each student draw one or two of the elements. Even the student(s) who just has to draw *one* “partridge in a pear tree” will have to do it twelve times!
 - c. Have the students record in their journal something that they would give their “true love” for Christmas and how many they would want to give them! *True Love Book*.
 - d. Finally, you can have the students come up with their own things (as a class shared writing or individually) that they would give someone for each of the twelve days, making that into a class book as well.

January

1. January is all about winter, and so is the next story—*There Was A Cold Lady Who Swallowed Some Snow*. What would the students want to swallow from each of the different seasons? If they also chose snow, what would they make when they coughed it back up?

February

1. Another fun song to sing that follows a growing pattern is *Mother Goose Bird*. This song also has actions that the students must repeat for each new thing and then do continuously while singing the next verse. It makes adults dizzy, but the students love it!

Materials

- There Was An Old Lady Who Swallowed a Bell*
- The Twelve Days of Christmas*
- CD player
- 15 Christmas Favorites: Twelve Days of Christmas CD*
- Twelve Days of Christmas Book*
- True Love Book*
- Crayons

Materials

- There Was A Cold Lady Who Swallowed Some Snow*

Materials

- CD player
- Dr. Jean & Friends CD*
- Mother Goose Bird Lyrics*
- This is the House that Was Tidy and Neat*

Materials

- There Was a Bold Lady Who Wanted a Star*
- There Was an Old Lady Who Swallowed Fly Guy*



Materials

- I Know a Shy Fellow Who Swallowed a Cello*
- Various instruments
- Sound clips
- Pictures of instruments
- There Was an Ol' Cajun*



2. *This is the House that Was Tidy and Neat* is a cute story about some kids who mess up their home while their mom is out. It is another story that can be acted out or otherwise recreated.

March

1. *There Was a Bold Lady Who Wanted a Star* and *There Was an Old Lady Who Swallowed Fly Guy* are two more wonderful examples of exciting stories that include growing patterns.
 - a. For *There Was a Bold Lady Who Wanted a Star*, discuss different modes of transportation.
 - b. Do a class shared writing activity brainstorming other ways not mentioned in the story that the “Bold Lady” could use to get to the star that she desires.
 - c. In their journals, have students come up with another shape that they might want and a word that would rhyme with that shape to complete the statement. Also, ask what would they want to do with that shape.

April

1. April can get a little long sometimes. An enjoyable story to break-up the monotony is *I Know a Shy Fellow Who Swallowed a Cello*. Similar to *The Little Old Lady Who Was Not Afraid of Anything*, this story can easily be integrated with musical instruments. If possible, bring in real examples of each instrument, such as a cello, harp, sax, fiddle, cymbal, flute, kazoo, or cascabel; at least have a real picture and sound clips for the instruments (see additional resources for where to find those).
 - a. Refer to the pictures and show how each instrument is used in a different genre of music. Discuss how music changes through time and across different areas of the country/world.
 - b. Again, have the students participate in helping you tell the story by playing each instrument/sound (or showing the picture) at the appropriate time.
2. *There Was an Ol' Cajun* is a good story to talk about how people are different in different areas of the world. This story takes place in Louisiana. The story is told using the Southern dialect and colloquial terms and the animals that would be found in that area of the country.
 - a. If you have a large population of students from a given area of the world, you could write a version of the story using animal names in their language, or animals native to that area of the world.

May

1. There are a few different stories (including animal versions) about getting ready to enjoy the outdoors: *There Was a Coyote Who Swallowed a Flea*, *There Was An Old Lady Who Swallowed a Trout* (great for talking about different animals that live in the water, expanding on just fish), *There Was An Old Lady Who Swallowed the Sea*, and *Old MacDonald*.
 - a. *Old MacDonald* would have to be modified slightly in that you would need to repeat each previous animal sound at the end of each verse to show the repeating pattern each time rather than only at the end. This is a perfect time to discuss different animals on a farm.

Materials

- There Was a Coyote Who Swallowed a Flea*
- There Was An Old Lady Who Swallowed a Trout*
- There Was An Old Lady Who Swallowed the Sea*
- Old MacDonald*

June

1. To get the students ready for summer, an amusing, culminating book to read is *There Was An Old Lady Who Swallowed a Shell*. This one has her swallowing things found on a beach necessary for building a sand castle. This can also be used to make a final class book with groups of students illustrating each page (*There Was an Old Lady Who Swallowed a Shell Book Page*).

Materials

- There Was An Old Lady Who Swallowed a Shell*
- There Was An Old Lady Who Swallowed a Shell Book Page*
- Crayons

Assessment Suggestions

- Collect student samples to see if students have understood growing patterns.
- When the students show that they understand growing patterns, have them create a growing pattern using different types of manipulatives.

Curriculum Extensions/Adaptations/Integration

- Any of these stories can easily be acted out using simple props, puppets, masks/costumes, etc.
- When talking about *I Know a Shy Fellow Who Swallowed a Cello*, you can also share the music for *Peter and the Wolf*, by Tchaikovsky, or *Carnival of the Animals*, by Camille Saint-Saëns and demonstrate how each animal/character is represented by a different instrument and sound.

Family Connections

- When reading *There Was an Ol' Cajun*, send home a letter to your students' parents, asking for information about their country of origin, and whether this heritage is recent in their family history or many generations back. Use this information to write a variety of stories using words or animals/creatures from that area/country of the world. Send home a copy of the story that they can have as a keepsake.

Additional Resources

Books

- There Was an Old Lady Who Swallowed a Fly*, by Simms Taback; ISBN: 0670869392
- The Little Old Lady Who Was Not Afraid of Anything*, by Linda Williams; ISBN: 0690045840
- The Deep Blue Sea*, by Audrey Wood; ISBN: 0439753821
- There Was An Old Lady Who Swallowed A Bat!*, by Lucille Colandro; ISBN: 0439737664
- I Know an Old Lady Who Swallowed a Pie*, by Alison Jackson; ISBN: 0525456457
- There Was an Old Lady Who Swallowed a Bell*, by Lucille Colandro; ISBN: 043986643X
- The Twelve Days of Christmas*, by Dorothee Duntze; ISBN: 1558581510
- The 12 days of Christmas*, by Linnea Asplind Riley; ISBN: 0689802757
- Hilary Knight's The twelve days of Christmas*, by Hilary Knight; ISBN: 0689835477
- The twelve days of Christmas*, by Vladimir Vagin; ISBN: 0060276525
- There Was A Cold Lady Who Swallowed Some Snow!*, by Lucille Colandro; ISBN: 0436567033
- This Is the House That Was Tidy and Neat*, by Teri Sloat; ISBN: 0805069216
- There Was a Bold Lady Who Wanted a Star*, by Charise Mericle Harper; ISBN: 0316146730
- There Was An Old Lady Who Swallowed Fly Guy*, by Tedd Arnold; ISBN: 0439639069
- I Know a Shy Fellow Who Swallowed a Cello*, by Barbara S. Garriel; ISBN: 1590780434
- There Was an Ol' Cajun*, by Deborah Ousley Kadair; ISBN: 1565549171
- There Was an Old Lady Who Swallowed a Trout*, by Teri Slowat; ISBN: 0805042946
- There Was an Old Lady Who Swallowed the Sea*, by Pam Adams; ISBN: 1846430739
- There Was a Coyote Who Swallowed a Flea*, by Jennifer Ward; ISBN: 0873588983
- There Was An Old Lady Who Swallowed a Shell*, by Lucille Colandro; ISBN: 0439815363
- Inside a Zoo in the City*, by Alyssa Satin Capucilli; ISBN: 0590997157
- There Was An Old Witch*, by Howard W. Reeves; ISBN: 0786804386

Media

15 Christmas Favorites: Twelve Days of Christmas, Songs for Children Label; ASIN: B00009V7TU; www.amazon.com

Dr. Jean & Friends, by Jean R. Feldmen; Tampa, FL : Progressive Music, 1998; ASIN: B000F8VD3K

Dr. Jean's Totally Math CD, ASIN: B000JELRJU

There Was An Old Lady Who Swallowed a Fly, DVD ASIN: B00023TG6E

Web sites

http://www.partnersinrhyme.com/pirsounds/WEB_DESIGN_SOUNDS_WAV/INSTRUMENTS.html (musical instrument sound effects)

<http://classroomclipart.com/cgi-bin/kids/imageFolio.cgi?direct=Music> (musical instruments pictures)

http://barbaragarriel.com/cd_shyfellow1.htm (*I Know a Shy Fellow* CD)

<http://www.uen.org/dms> (The Pot that Juan Built & This Is the House that Jack Built, available from emedia on the UEN site).

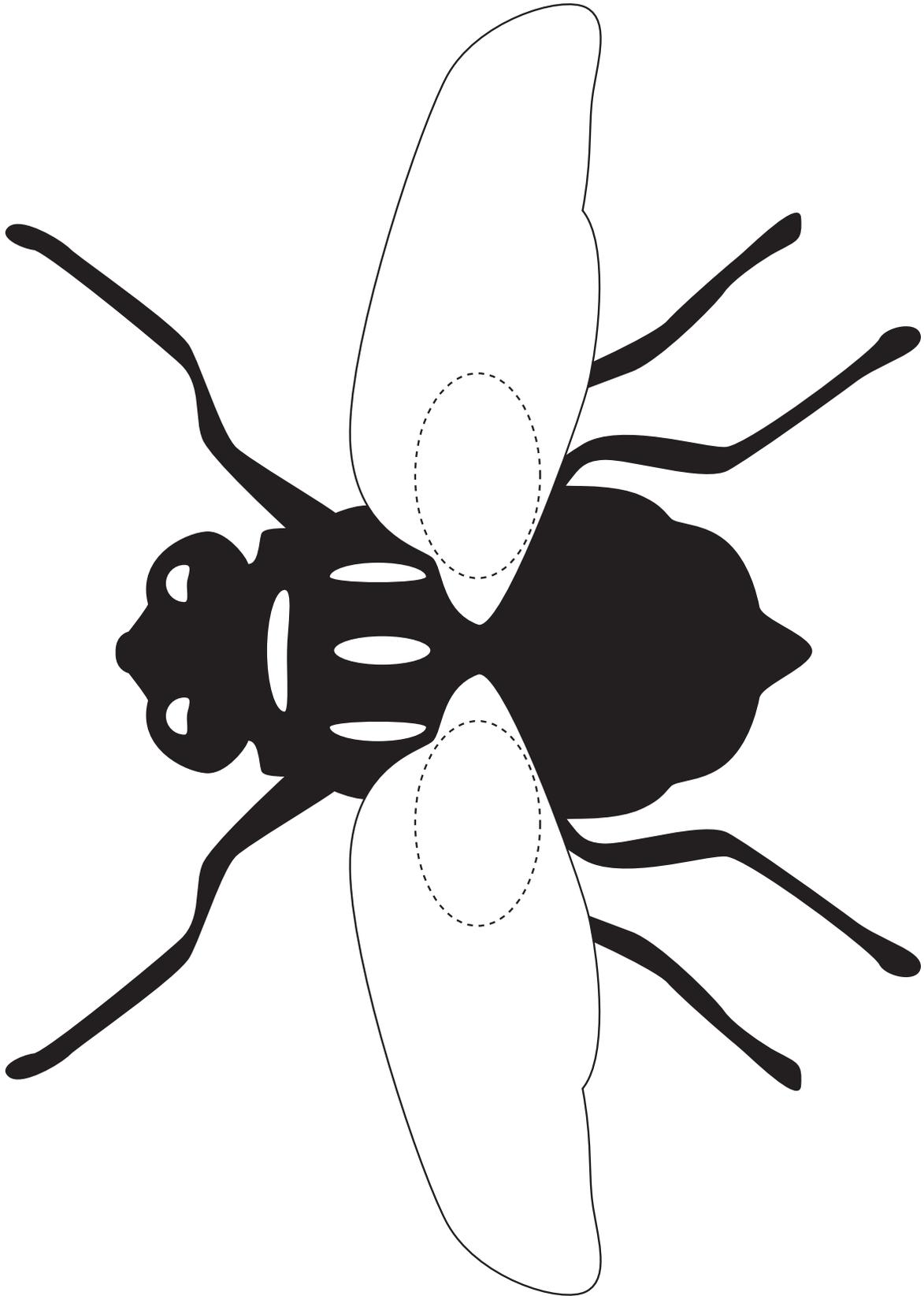
Organizations

National Counsel of Teachers of Mathematics, 1906 Association Drive, Reston, VA 20191-1502, (703) 620-9840, <http://www.nctm.org>

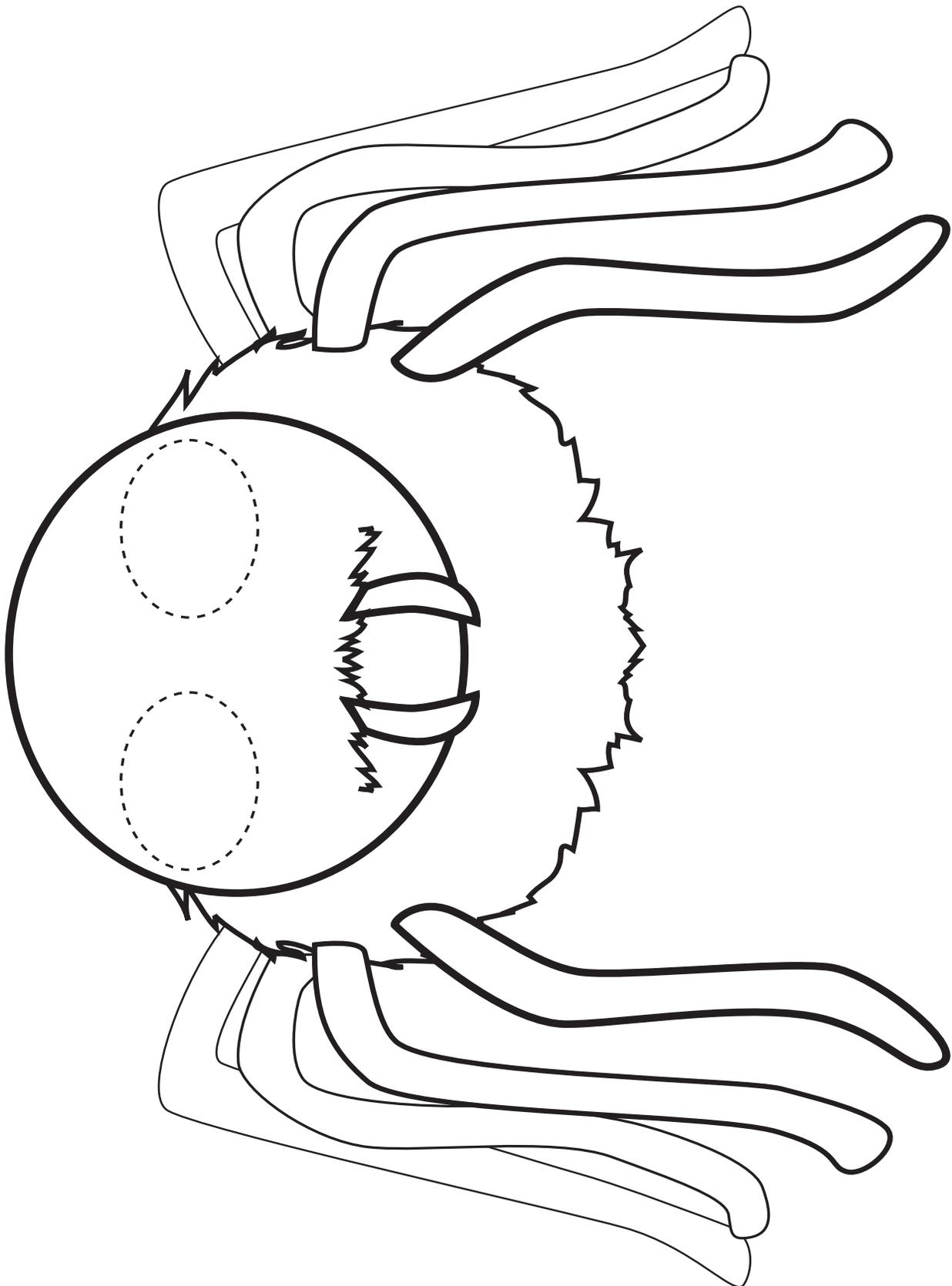
Old Lady Mask



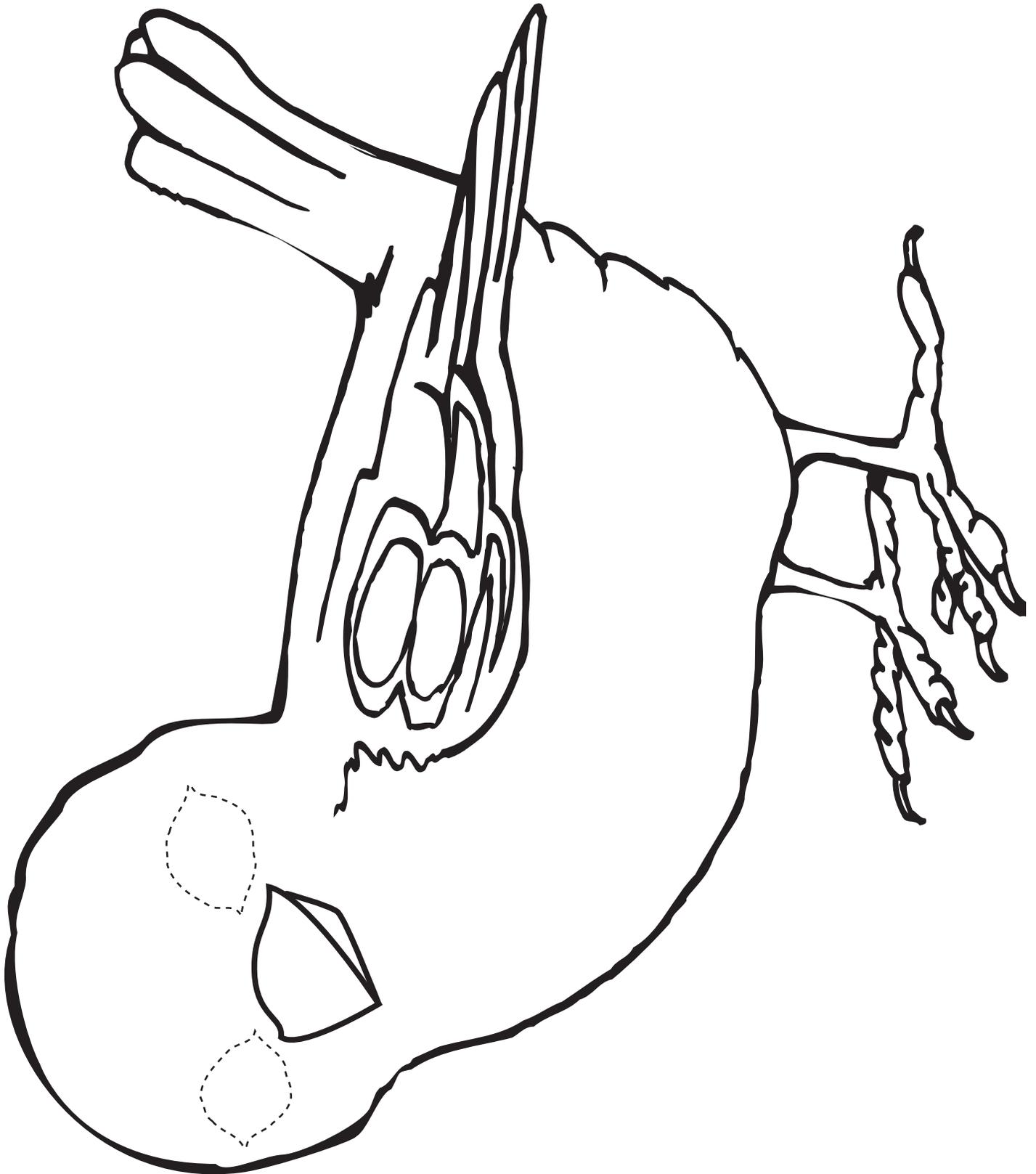
Fly Mask



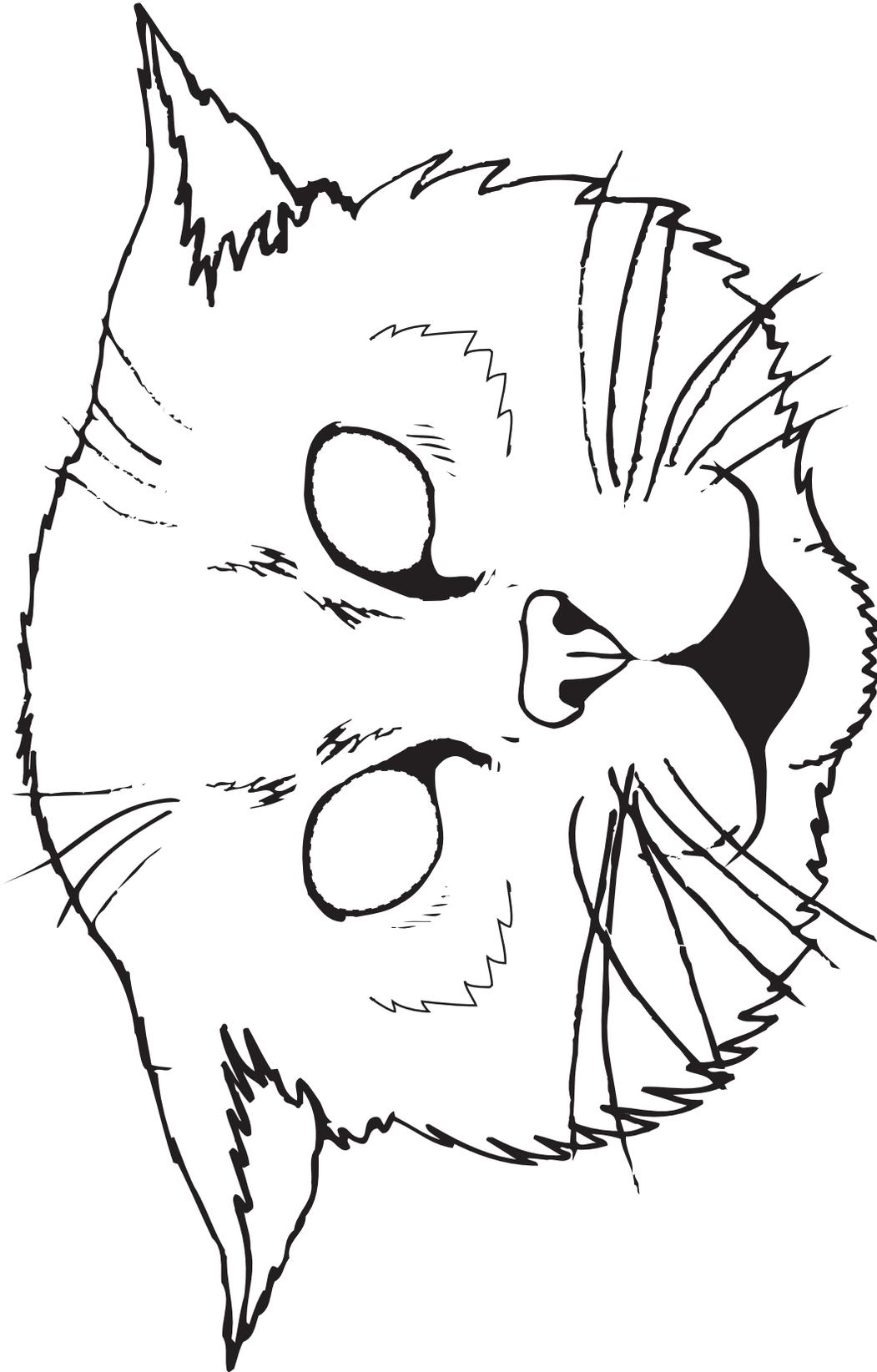
Spider Mask



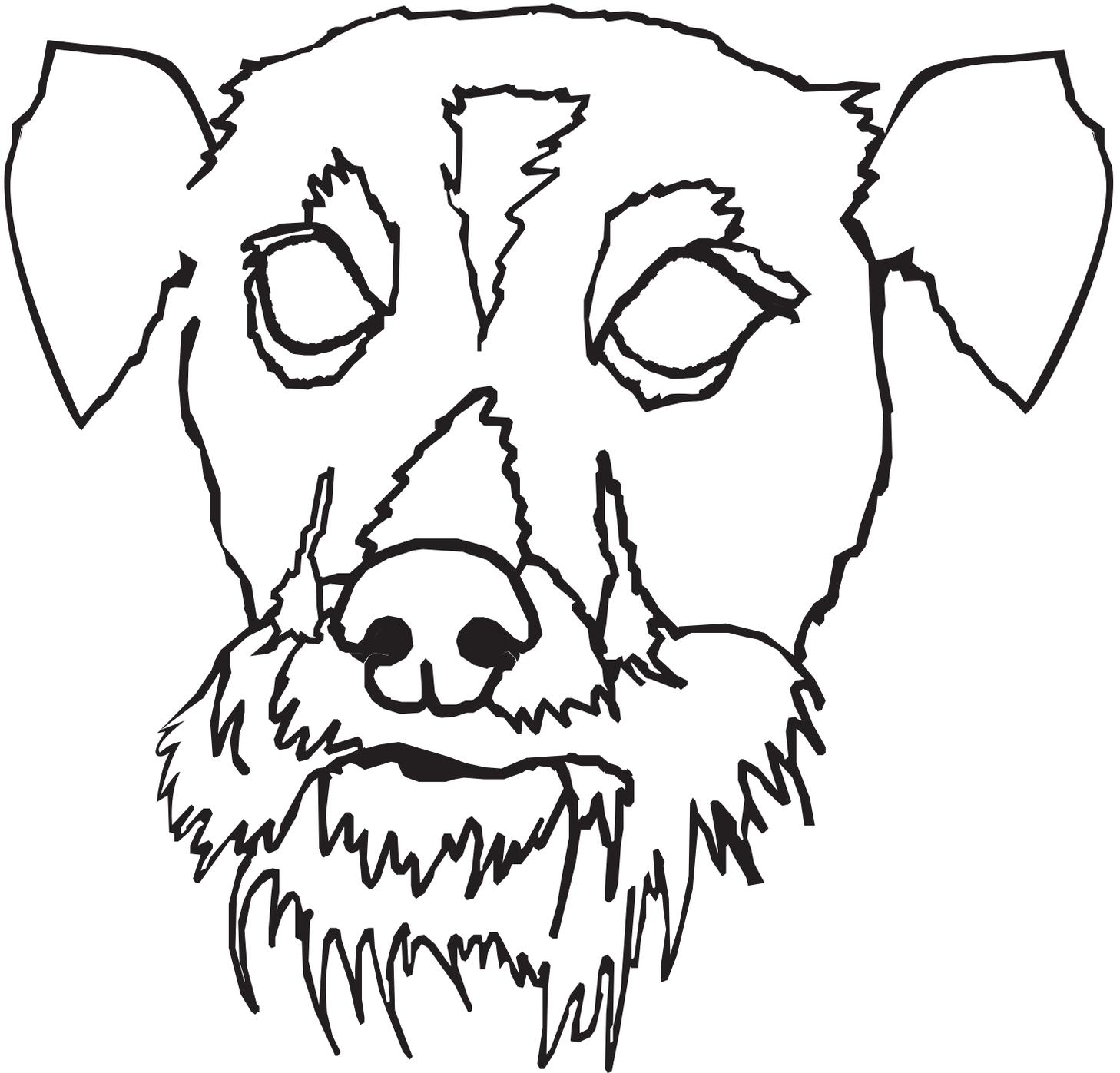
Bird Mask



Cat Mask



Dog Mask



Cow Mask



Horse Mask



“Tooty Ta” Lyrics

From Dr. Jean & Friends © Dr. Jean Feldman

**A tooty ta a tooty ta a tooty ta ta (with both thumbs out and in front of you with elbows slightly bent by sides and waving side to side)
A tooty ta a tooty ta a tooty ta ta
Thumbs up (put thumbs up)**

**A tooty ta a tooty ta a tooty ta ta
A tooty ta a tooty ta a tooty ta ta
Elbows back (thumbs up with elbows next to sides)**

Continue in like manner with feet apart...knees together...bottoms up...tongue out...eyes shut...turn around (can be turning around once or continuously)...sit down.

Mother Goonie Bird Lyrics

From Dr. Jean & Friends © Dr. Jean Feldman

**Mother Goonie Bird has seven chicks
And seven chicks has Mother Goonie Bird
And they couldn't swim—No!
And they couldn't fly—No!
All they did was go like this—right arm (flap right arm).**

**Mother Goonie Bird has seven chicks
And seven chicks has Mother Goonie Bird
And they couldn't swim—No!
And they couldn't fly—No!
All they did was go like this—left arm (flap left arm).**

Continue in like manner through right foot...left foot...nod your head...turn around...sit down

Twelve Days of Christmas Class Book

On the _____ day of Christmas, my true love gave to me

_____ .

Name _____

True Love Class Book

I would give my true love _____ .

Name _____

There Was an Old Lady Who Swallowed a Shell

There was an old lady who swallowed a _____ to
help her build a sandcastle.

Illustrated by

Center Ideas for Growing

Math
Standard
II

Objective
2

Connections

<p>Standard II: Students will sort and classify objects as well as recognize and create simple patterns.</p> <p>Objective 2: Identify, duplicate, describe, and extend simple repeating and growing patterns.</p> <p>Intended Learning Outcomes:</p> <ol style="list-style-type: none"> 1. Demonstrate a positive learning attitude. 2. Understand and use basic concepts and skills. 3. Communicate clearly in oral, artistic, written and nonverbal forms. <p>Content Connections: Language Arts VII-2; Comprehension strategies Language Arts VIII-1; Write in different forms and genres Content Core I-3; Acting out stories</p>
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Background Information

This activity includes five center ideas that incorporate growing patterns. Each center is based around a book, so it would be best to read the book with the class at least one time before having them participate in the center.

Each center will have the students re-creating the pattern from the book in different ways, including arranging pre-drawn manipulatives, creating their own growing pattern, making the pages in a book to match the story, building a structure step-by-step and recording it in a journal, and acting out the story using puppets.

Research Basis

Burns, M. (1992). *About teaching mathematics: a K-8 resource*. Math Solutions Publications, Sausalito, CA, 28.

“The more experience that a child has with physical objects in the environment, the more likely that related understanding will be developed. A child can obtain physical knowledge...directly from perceiving the objects themselves. The child derives logical knowledge not from the objects themselves but from manipulating them and internally processing these experiences.... First-hand experimentation is needed. Children need experience with objects before abstractions in mathematics are introduced.

The more opportunities children have to interact with peers, parents, teachers, the more viewpoints they will hear. Social interaction stimulates children to think through their viewpoints and

to approach objectivity. They achieve perspective on their own ideas when confronted with others' thoughts.”

Sutton, J., and Krueger, A. (2002). What instructional strategies make mathematics teaching more learner-centered? *EdThoughts: What we know about mathematics teaching and learning*. 21.

Centers are essential to learning in kindergarten. As stated here, it is imperative that mathematical knowledge be based on prior-learning and what better way than to teach/introduce a concept and then re-enforce it through having the students participate in learning, based on books they have already been exposed to and explored as a whole group.

“Students learn by connecting new ideas to prior knowledge. Effective, student-centered instruction combines guided questioning with a set of experiences and lessons chosen to build upon the experiences and level of understanding that students already have.... Students will use a variety of tools, including manipulatives, calculators, and computers, to explore mathematics concepts and make sense of them individually and as a group of learners.”

Invitation to Learn

Have the students stand with you to sing and dance to some of the songs that are based on a growing pattern. Ask for three volunteers for each song.

Sing *My Aunt Came Back* from *Best of Wee Sing* by Pamela Conn Beall and Susan Hagen Nipp, and *Mother Goonie Bird*, by Dr. Jean on *Dr. Jean & Friends*. After you sing, I will need three additional volunteers for each song to come up and do the whole sequence in order to review each element of the repeating pattern.

Instructional Procedures

Center #1—Rooster’s Off to See the World

1. Using the *Rooster’s Animals*, make a center set (either copy on white, color, and mount on different colors of paper or copy on different colors of paper). Cutout and laminate all the animals that correspond to the story.
2. Students will use the cards to re-create the story by putting them in the correct order and with the correct number of each animal.
3. In addition, you can make an outline of the final product that the students just have to fill in with the manipulative pictures.

Materials

- CD player
- Best of Wee Sing CD
- Dr. Jean & Friends CD



Materials

- Rooster’s Off to See The World
- Rooster’s Animals
- Scissors
- Colored paper
- Glue



Materials

- This Is The House That Jack Built*
- Jack's Character Puppets*
- Scissors
- Tongue depressors
- Puppet stage



Center #2—This Is the House That Jack Built

1. Using *Jack's Character Puppets*, make a puppet of each of the characters, mounted on tongue depressors.
2. One student will be the narrator to tell the story while the other students act it out.
3. The “actors” will choose one or two character puppets depending on how many students are in each group, to use to act out the story.
4. The narrator will then “read” the story by looking at the pictures and telling the story in his/her own words as the other students use the puppets to act it out.

Materials

- Jack The Builder*
- Building Box*
- Building blocks
- Crayon



Center #3—Jack the Builder

This story is not necessarily a repeating pattern, but as the students re-create it in their own way, it becomes one. It would also be most beneficial to have an adult supervise the center (you, an aide, or a parent volunteer).

1. Put a container of building blocks, the *Building Box*, and crayons, at the center.
2. The students will pick three blocks and make something. Then they will color the first box to match what they have created with their blocks.
3. Then they will add *one or two* more blocks to what they made before.
4. They will then draw the new creation in the next box, including what they had before and the new blocks they added.
5. They will continue in like manner until all boxes are full.

Materials

- House Booklet*
- Crayons



Center #4—The Napping House

This one may take more than one day to finish! You will also want an adult to supervise this center, as writing and complex repetition required.

1. Using the *House Booklet*, make a 6-8 page booklet that the students can use to make-up their own story of what they would find in a napping/waking/party/sad/etc. house.
2. Then have them create their own version of the story, drawing/ coloring the pictures to match in the outline of the house, making sure that they include each element of their pattern each time.

Center #5—The Deep Blue Sea

1. Give the students a bucket of pattern blocks, paper cutouts of the pattern blocks (available in the back of *Investigations: Pattern Trains and Hopscotch Paths* book or die-cuts), and their journals.
2. Have them create a “blue sea” with the diamonds.
3. Then they need to create an “island” on the sea with the tan rhombuses.
4. Next, they need to use one shape/color at a time to create a scene on that island.
5. Finally, they will use the cutouts to copy/glue their final scene into their journal.

Materials

- The Deep Blue Sea*
- Investigations: Pattern Trains and Hopscotch Paths*
- Pattern blocks
- Cut-outs of patterns blocks
- Glue or glue sticks
- Student journals

Center #6—Mr. Noisy’s Book of Patterns

1. Use *Patterns and Shapes* for 1-2 days/weeks
2. Have the students color the patterns correctly following the growing pattern sequence.
3. The students will then copy one of the growing patterns from the paper into their journal.
4. Use *Fill in Patterns and Shapes* for 1-2 days/weeks.
5. Check for students’ comprehension as they are now extending their thinking!

Materials

- Mr. Noisy’s Book of Patterns*
- Patterns and Shapes*
- Fill in Patterns and Shapes*
- Crayons
- Student journals

Assessment Suggestions

- Have the students do a self-check on *Rooster’s Off to See the World* to see if they have the correct number of each animal and in the correct order. It is self-checking, especially as you explain the “stair-casing” of the final product. If you have the book, you can photocopy the page with all the animals on it as a way for the students to check their own work.
- Students must turn in their paper from *Mr. Noisy’s Book of Patterns* for you to check. Return to the students with marks next to the ones that are incorrect, but do not tell them what is wrong—see if they can figure out their mistakes on their own.
- Ask developmental/scaffolding questions as students are creating their patterns.

Curriculum Extensions/Adaptations/Integration

- Make a class book of the pages that the students made in the *Jack the Builder* center. You can also have the students 1) take a picture of what they build with a digital camera, 2) print out the picture, 3) glue it on the top of a page and 4) have them draw it again on the bottom. You could also make a book of the pictures of their creations and put it in a center that students can then try to re-create.
- Have the students act-out *This is the House That Jack Built* in a performance for another class or parents, including full-dress costumes or masks that the children have drawn for each character.
- Do a whole-class shared writing activity to come up with a new version of *The Napping House* and then make a class book with the students illustrating each page.
- Laminate the blackline from *Mr. Noisy's Book of Patterns*, and put in a center and have the students copy the patterns using pattern blocks, beads, buttons, etc.

Family Connections

- Encourage your students to go through their books at home and see if they have any stories that contain growing patterns. Have them bring in the books and explain the growing pattern. If possible, have a parent come in and read the book to the class.
- Include making a growing pattern at a Parent Math Night as an activity/skill for the students to teach the parents.
- Send home blank sheets from *Mr. Noisy's Book of Patterns* and see if the students can “teach” their parents about growing patterns. Have the students correct the parents’ “homework” and return to school to give their parents a “grade.”

Additional Resources

Books

Jack the Builder, by Stuart Murphy; ISBN: 0060557745

Mr. Noisy's Book of Patterns, by Rozanne Williams; ISBN: 0916119963

The Deep Blue Sea: A Book of Colors, by Audrey Wood; ISBN: 0439753821

This Is the House That Jack Built, by Simms Taback; ISBN: 0399234888

The Napping House, by Audrey Wood and Don Wood; ISBN: 0590975463

Investigations: Pattern Trains and Hopscotch Paths by Rebeka Eston; ISBN: 1572329270

Navigating through Algebra in Pre-Kindergarten-Grade 2, by Carole Greenes, Mary Cavanagh, Linda Dacey, Carol Findell and Marian Small; ISBN: 8973534999

About Teaching Mathematics: A K-8 Resource by Marilyn Burns; ISBN: 0941355055

Media

Best of Wee Sing, by Pamela Conn Beall and Susan Hagen N., from Scholastic.

Dr. Jean & Friends, by Jean R. Feldmen; Tampa, FL: Progressive Music 1998; ASIN B000F8VD3K

Web sites

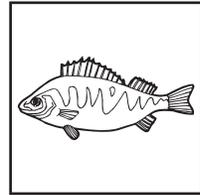
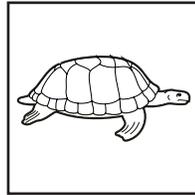
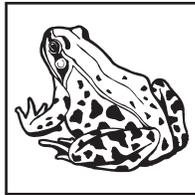
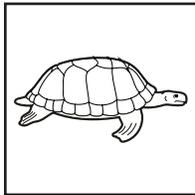
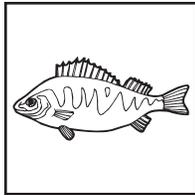
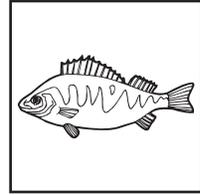
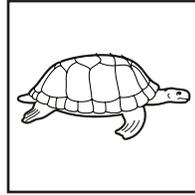
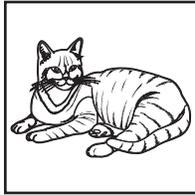
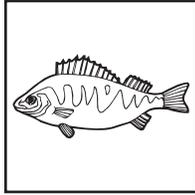
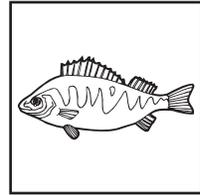
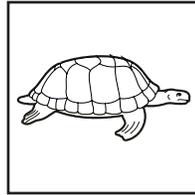
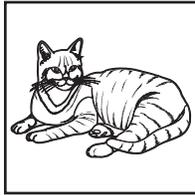
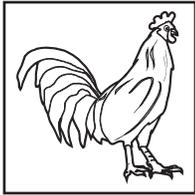
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<http://mathcentral.uregina.ca>

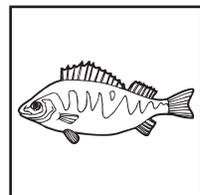
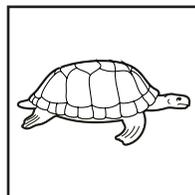
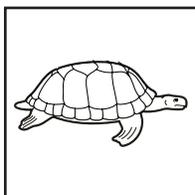
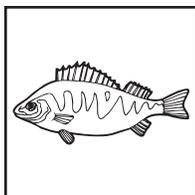
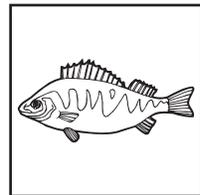
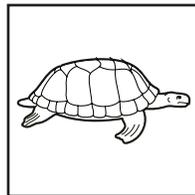
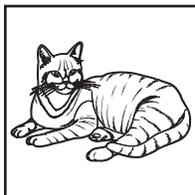
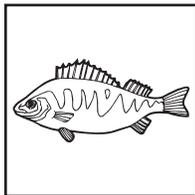
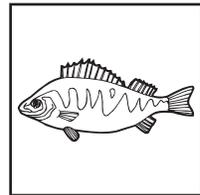
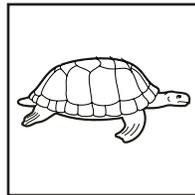
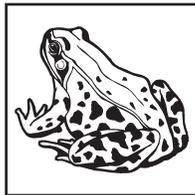
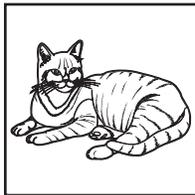
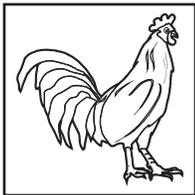
Organizations

National Counsel of Teachers of Mathematics, 1906 Association Drive, Reston, VA 20191-1502, (703) 620-9840, <http://www.nctm.org>

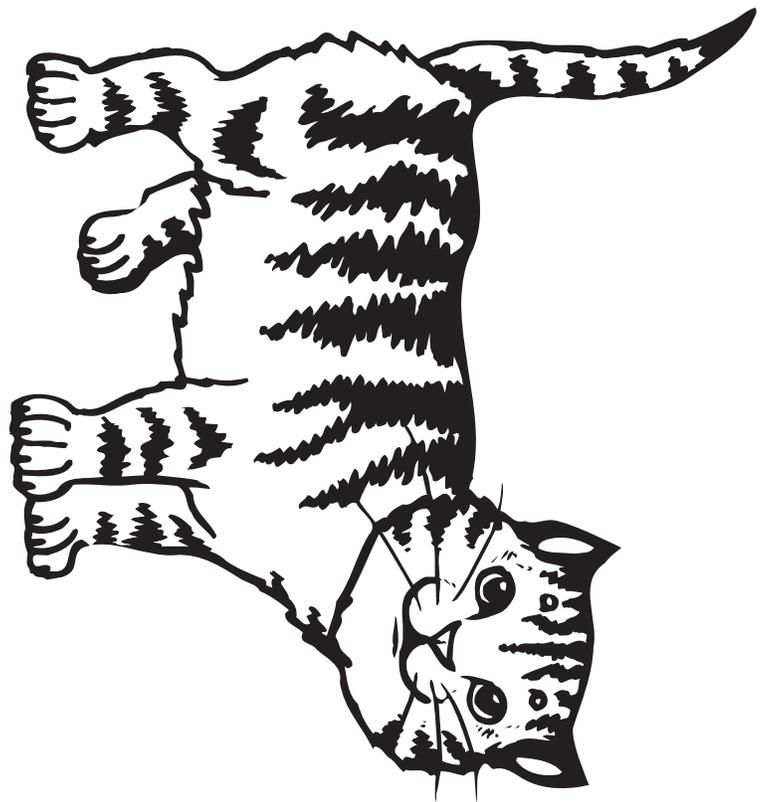
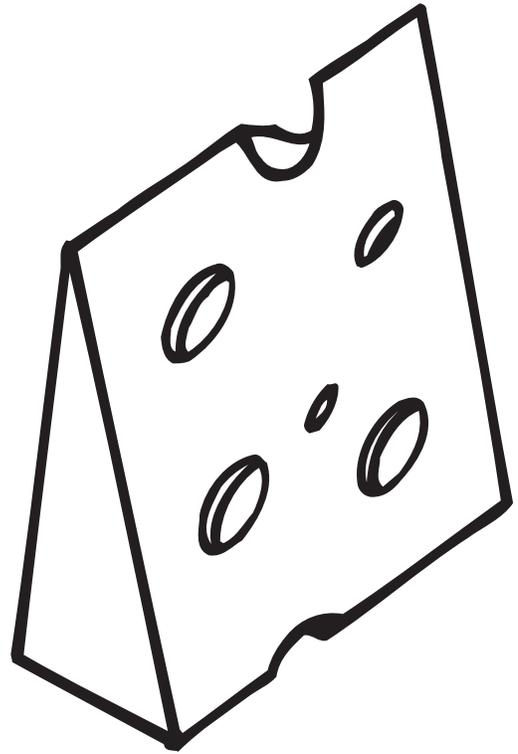
Rooster's Animals



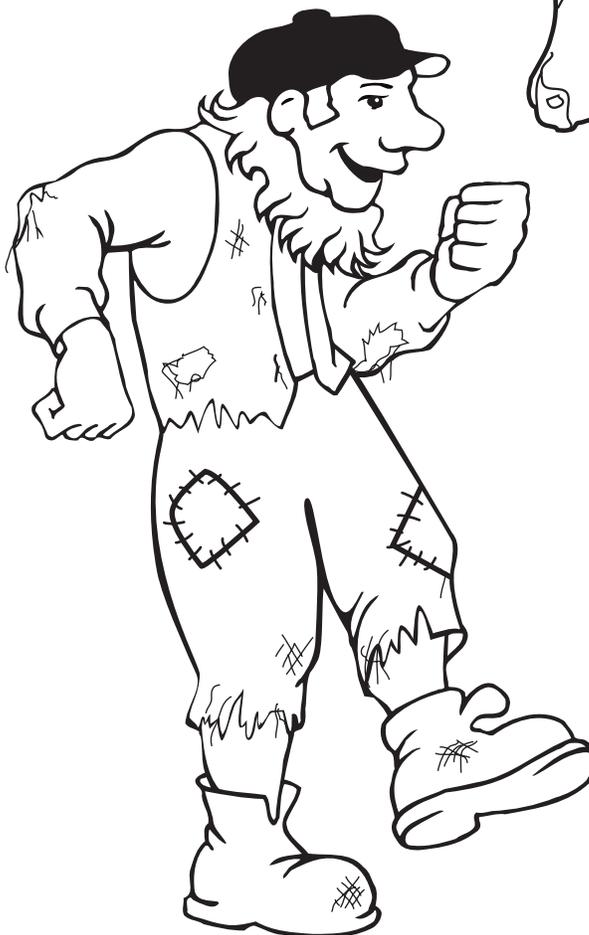
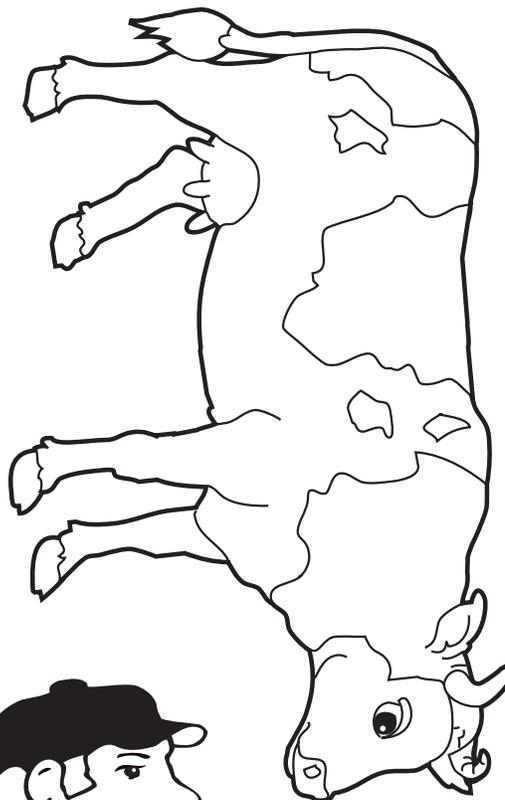
Rooster's Animals



Jack's Character Puppets



Jack's Character Puppets



Jack's Character Puppets



Name _____

Building Box

House Booklet

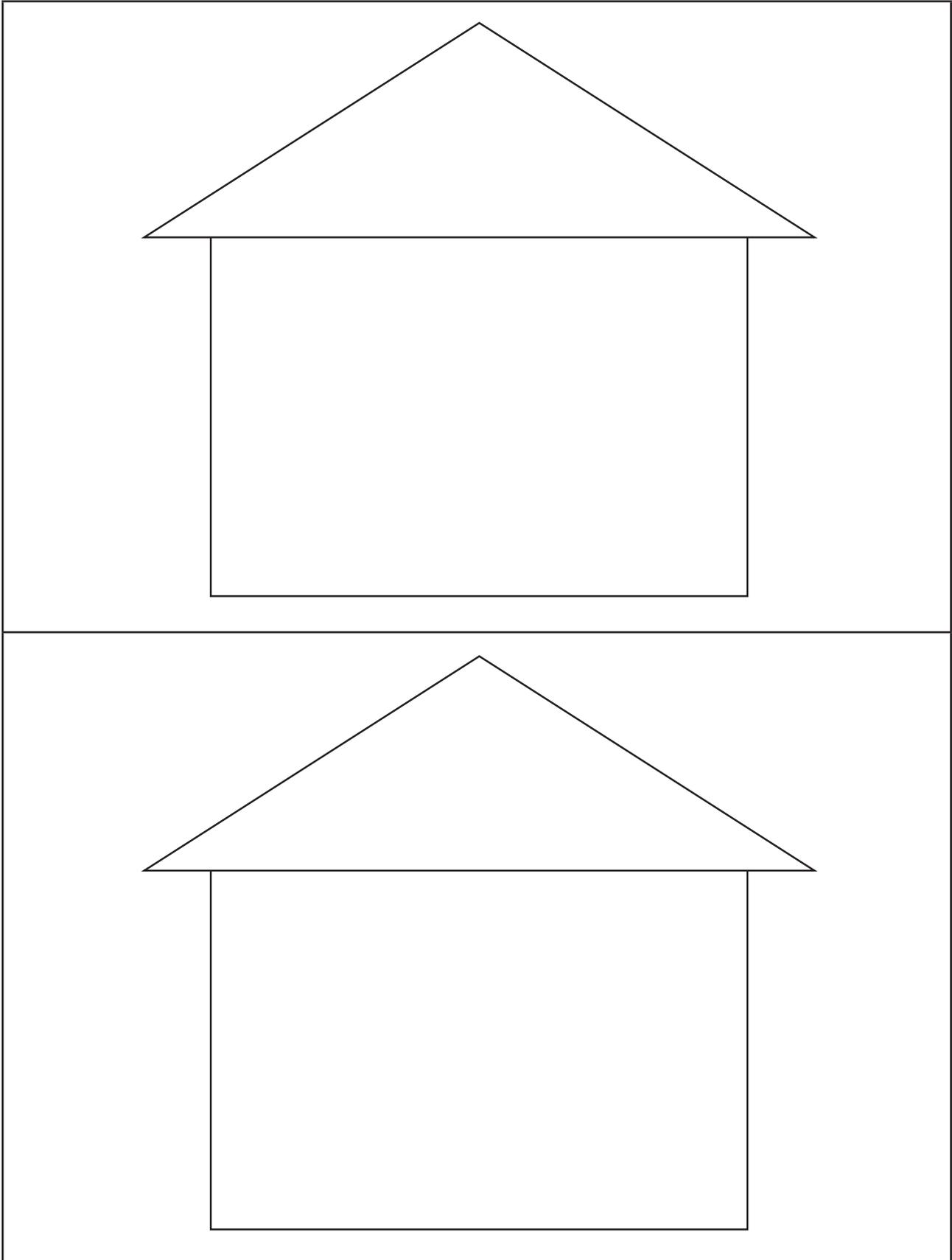
The _____ House

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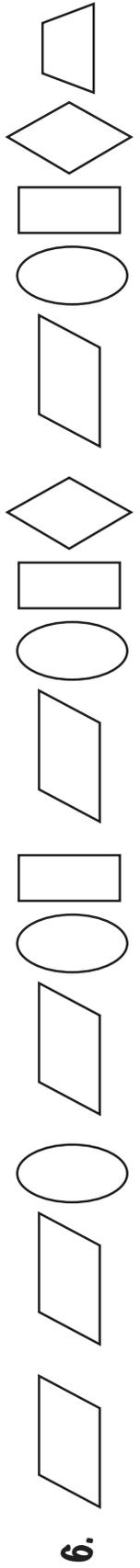
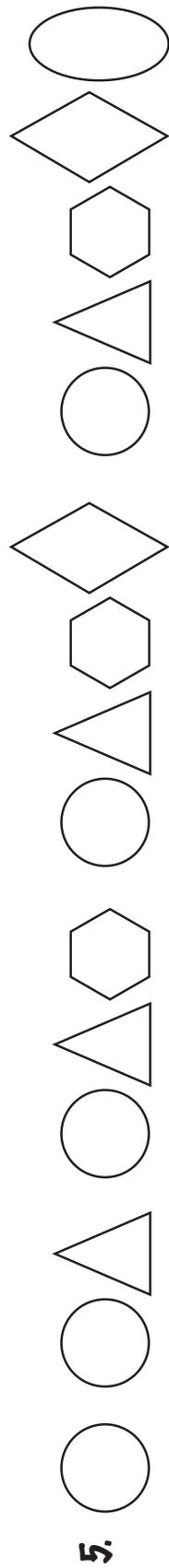
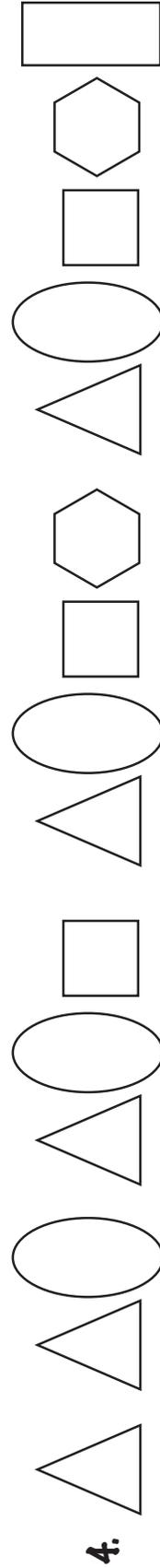
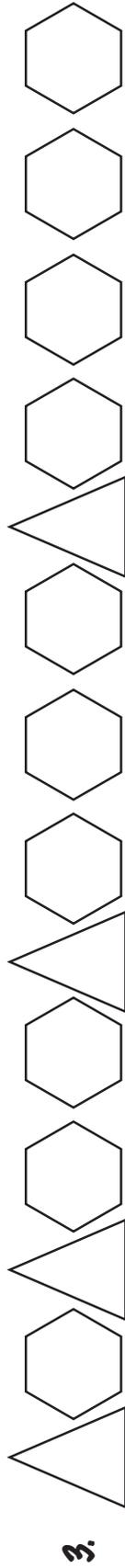
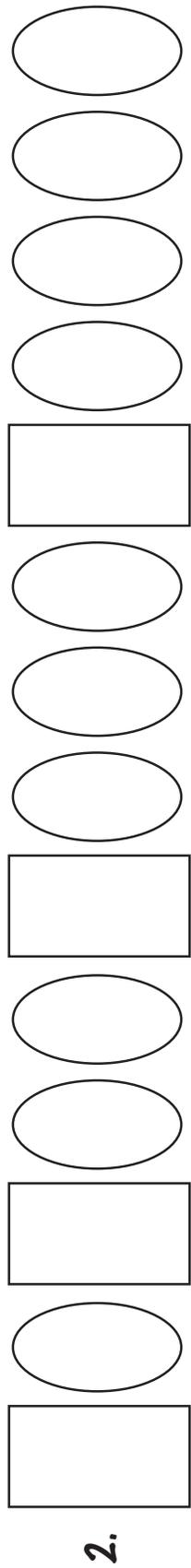
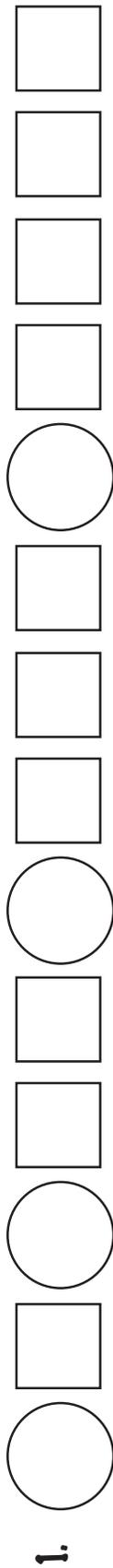
House Booklet



Name _____

Patterns and Shapes

Color each shape a different color to complete the growing pattern.



Content III-2

Activities

Environment & Animals

Camp Paws and Claws: Pets

Standard III:

Students will develop an understanding of their environment.

Objective 2:

Observe and describe animals in the local environment.

Intended Learning Outcomes:

1. Observe, describe, draw, and compare familiar animals.
2. Describe how young animals are different from adult animals.
3. Observe and imitate the sounds and movements of animals with songs, dances, and storytelling.
4. Distinguish between real and make-believe animal behaviors.

Content Connections:

Math II-1; Sort and classify objects
 Math III-3; Collect and organize data
 Language Arts; I, II, IV-VIII

*Content
 Standard
 III*

*Objective
 2*

Connections

Background Information

Camp Paws and Claws is a three day activity that reinforces what students have learned throughout the year about animals. For each activity, a different group of animals is studied. These activities focus on pets: cats, dogs, birds, and fish. Students will re-read both fiction and non-fiction stories that have been previously introduced during the school year. As they read the books, they will have activities to complete in order to earn their “badge” for that animal. Each student will make a paper bag vest on which they will be able to display badges they have earned.

Camp can also have many extra activities added that will create a more camp like environment, or it can be just part of the school day. One activity is a daily camp message that either the teacher or students compose on paper that looks like a tree or log. Another fun activity is to make a camp stew that is a variety of favorite breakfast cereals in a large pot over a pretend fire. Teachers can also set up a tent in their classroom for a fun reading area.

In order for your students to be successful for these activities of Camp Paws and Claws, you should instruct them on the following items. They should understand realistic and unrealistic behaviors of pets, understand the process of how an egg hatches, identify parts of animals, and understand that some animals are make believe characters, and some are real animals.

Several of the books selected should be ones most of the children are familiar with already, and ones that might already be in your

library. I selected them so that it would be easy to teach Camp Paws and Claws, and to hopefully eliminate having to buy several books.

One item the students will make is a Science Journal. The science journal can be made with either plain white paper or with lined paper. Take cardboard or cardstock and punch holes in it. Tie the journal together with jute or yarn to make it appear rustic. At anytime during camp you can have the students pull out their journals and respond to a question or a picture you show them. Depending on the ability level of the students, you may choose to allow them to respond with pictures, words, or sentences.

Research Basis

Joshua, M. (2007). The effects of pictures and prompts on the writing of students in primary grades: Action Research by Graduate Students at California State University, Northridge. *Action in Teacher Education*. 29(2) 80-93.

Picture aided writing and drawing are more effective in primary grades than prompts alone. However, picture aides can hinder student creativity and therefore should be paired with student ability and background knowledge.

Michael, J. (2006). Where's the evidence that active learning works? *Advances in Physiology Education*. 30. 159-167.

This research article states the effectiveness of student-centered active learning. Research has proved the effectiveness and improvement of learning in active and passive styles of teaching. Learning should match the needs and personalities of the students.

Invitation to Learn

Favorite Pet Graph

The choices on the graph should be cat, dog, fish, and bird. To allow the activity to be completed by all children the graph should have a picture and the word of each animal. Give each child a small yellow post-it note. Allow the class a few minutes to write their name on the note and have them put their name under which pet animal is their favorite.

Instructional Procedures

Group students into four small groups or complete activities as a class. Each animal will have a tub with all materials necessary to complete the activities to earn the badge. Explain all activities to

children prior to allowing them to go to the centers. In each tub keep an example so that students know what to do.

Cats

1. Have the students read the book, *The Cat in the Hat*. Have each group member share his/her favorite part of the story. Orally discuss if a real cat could do what the cat did in the book.
2. In, *Animal Babies*, read the section on kittens. Have students identify the various parts of the cat verbally with another group member. In their science journal have the students draw a mother and baby cat and talk about how they are the same and different with a friend.
3. Make their own Cat book. Have each child make a book about cats. They will need a piece of construction paper and a copy of all the pages to the book. The book will have the children fill in high frequency sight words. When they finish have them read the book to themselves once. The book will also include a pointer, which is a craft stick with a pom-poms to create a paw. The students can use this pointer when reading the words to the story. The pointer is stored in a pocket on the back cover of the book. To make the pocket, cut a 3x5 index card in half and staple it on three of the sides to the back cover, then slide the pointer in.
4. When they are finished, they may cut out and color the cat badge and glue it to their vest.

Dogs

1. Have the students read the book *Go, Dog, Go!*
2. As a group retell the events of *Go, Dog, Go!* Perform by role playing for an adult in the classroom or to other group members. The children may refer to the book while acting it out.
3. Sort cards of pictures of character animals and real life animals. For example: A picture of the Cat from *Cat in the Hat* and a picture of a real life cat.
4. Animal Dancer Movement. Each child will be given a ribbon dancer, which is a dowel rod with a 2-3 foot ribbon attached to the end. In a bag, include various pictures of animals. One child will be in charge of showing the picture of the animal and

Materials

- Cat Book
- Pom-poms
- Tubs
- Drawing paper
- Crayons
- Pencils
- Craft stick
- Index cards
- Animal Badges
- Paper vest
- Ribbon Dancers
- Animal Pictures
- Adult and Baby Animal Cards
- Animal Cards
- How an Egg Hatches Cards
- Paint
- Construction paper
- Black marker
- Aluminum foil
- Science Journals
- Fish



turning on the music for the children to move like the animal would.

5. When all activities are complete the children may color and cut out their dog badge.

Birds

1. Read the book, *Are You My Mother?* Discuss the mothers and babies in the story. Discuss the names of mothers and babies of animals.
2. Make an *Adult and Baby Animal matching game*. Color and cut out squares of adult and baby animals. Match the adult and the baby. Practice using the names for each, for example: cat and kitten.
3. Read, *What Is a Bird?* and *A Nest Full of Eggs*. Orally discuss the process of making a bird nest and how eggs hatch.
4. Color and sequence cards of *How an Egg Hatches*. If a student puts their egg sequence cards in a different order, have the student orally explain the steps to you.
5. Color and cut out bird badge and put on their vest.

Fish

1. Read *Rainbow Fish*. Discuss what you can share at home and school.
2. Create A Fish activity. Students will have the palm of their hand painted in stripes of red, yellow, blue, green and white. Keeping the fingers close together the students will place their hand on the blue construction paper. The palm makes the head of the fish and the fingers created the fins and tail. After the child washes their hand they will paint their fingers with green paint and put it at the bottom of the paper to create "seaweed".
3. Attach a ½" x ½" aluminum foil scale. When fish dries, add eye and mouth details with black marker.
4. Read the book, *What Is a Fish?* Optional: Observe a fish in the classroom. Record findings in science journal.
5. When finished, color and cut out fish badge.

Assessment Suggestions

- Collect and assess science journals at the end of the day.
- Observe students while they act out the story, *Go, Dog, Go!*- add it will be assessed during activity
- Grade *How An Egg Hatches* activity.
- Allow the children to share something they learned about cats, dogs, fish, or birds to the class.
- Do a pre-assessment on how eggs hatch and determine what they already know.

Curriculum Extensions/Adaptations/Integration

- Have advanced students become “group leaders” and help other members remember how to do activities for badges.
- For any journaling activity, provide small post-it notes. Allow students to get assistance from you or another student on how to correctly spell the word. I tell the students to attempt to sound out the word on their own. Once they have done that I will help them correct it if needed. Some students do not want to write something incorrect. This allows them to try to spell the word on their own, but have it correctly written as well.
- Do additional activities in their science journal. Have students write real and make believe stories about their pet.

Family Connections

- Have students take their matching Adult and Baby Animal card game home and play with their parents.
- Have the parents and students discuss how animal mothers take care of their babies just like human parents take care of their babies.
- Have parents come into the classroom and share any knowledge they may have on a pet. They can also help work the centers and provide students with additional assistance.

Additional Resources

Books

The Cat in the Hat, by Dr. Seuss; ISBN 039480001X

Baby Animals, by Angela Royston; ISBN 0689715633

Go, Dog, Go! by P.D. Eastman; ISBN-10: 067988629X

ISBN-13: 978-0679886297

What Is a Fish?, by Lola M. Schaefer; ISBN 0736808655

Rainbow Fish, by Marcus Pfister; ISBN 1558580093

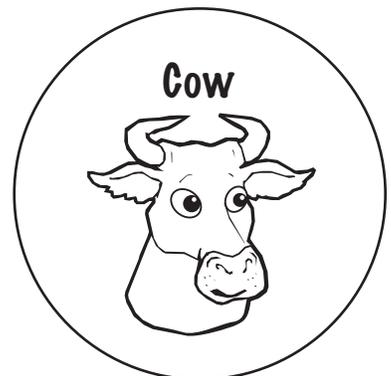
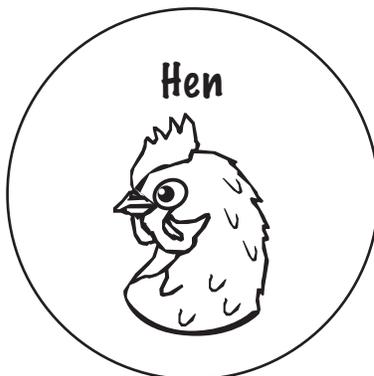
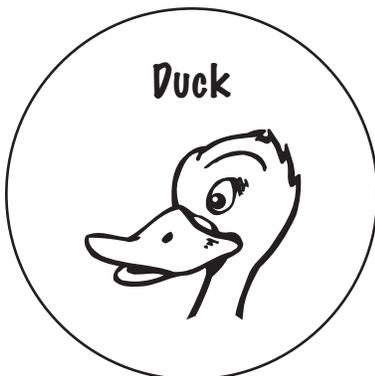
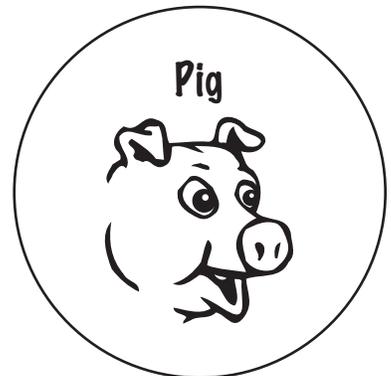
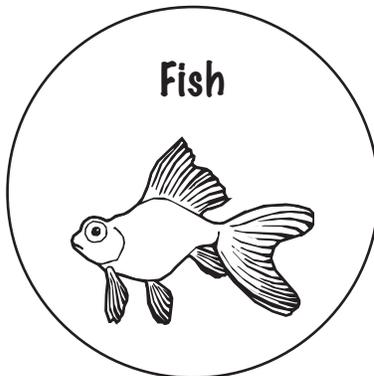
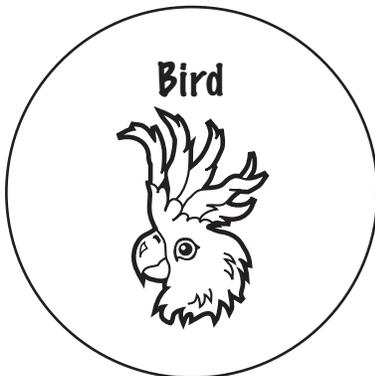
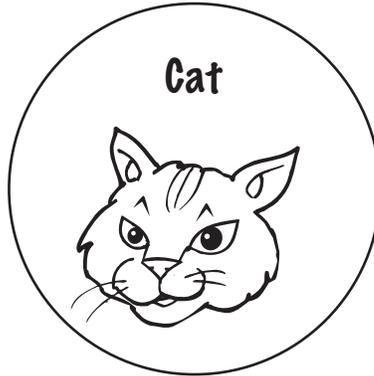
Are You My Mother?, by P.D. Eastman; ISBN-10: 0679890475

ISBN-13: 978-0679890478

What Is a Bird?, by Lola M. Schaefer; ISBN 0736808647

A Nest Full of Eggs, by Priscilla B. Jenkins; ISBN 0785761411

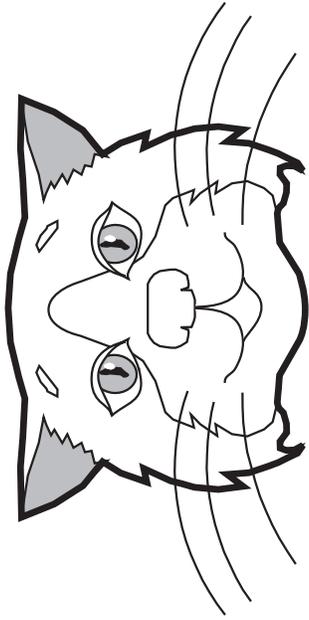
Animal Badges



My Cat Book

This book is dedicated to

By:



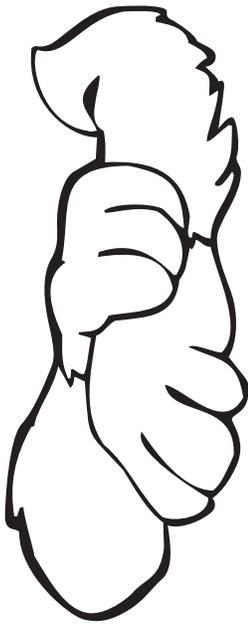
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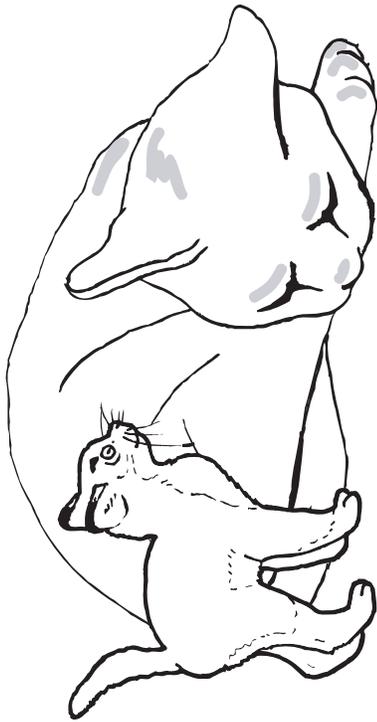
Cats have



Cats have

on their body.

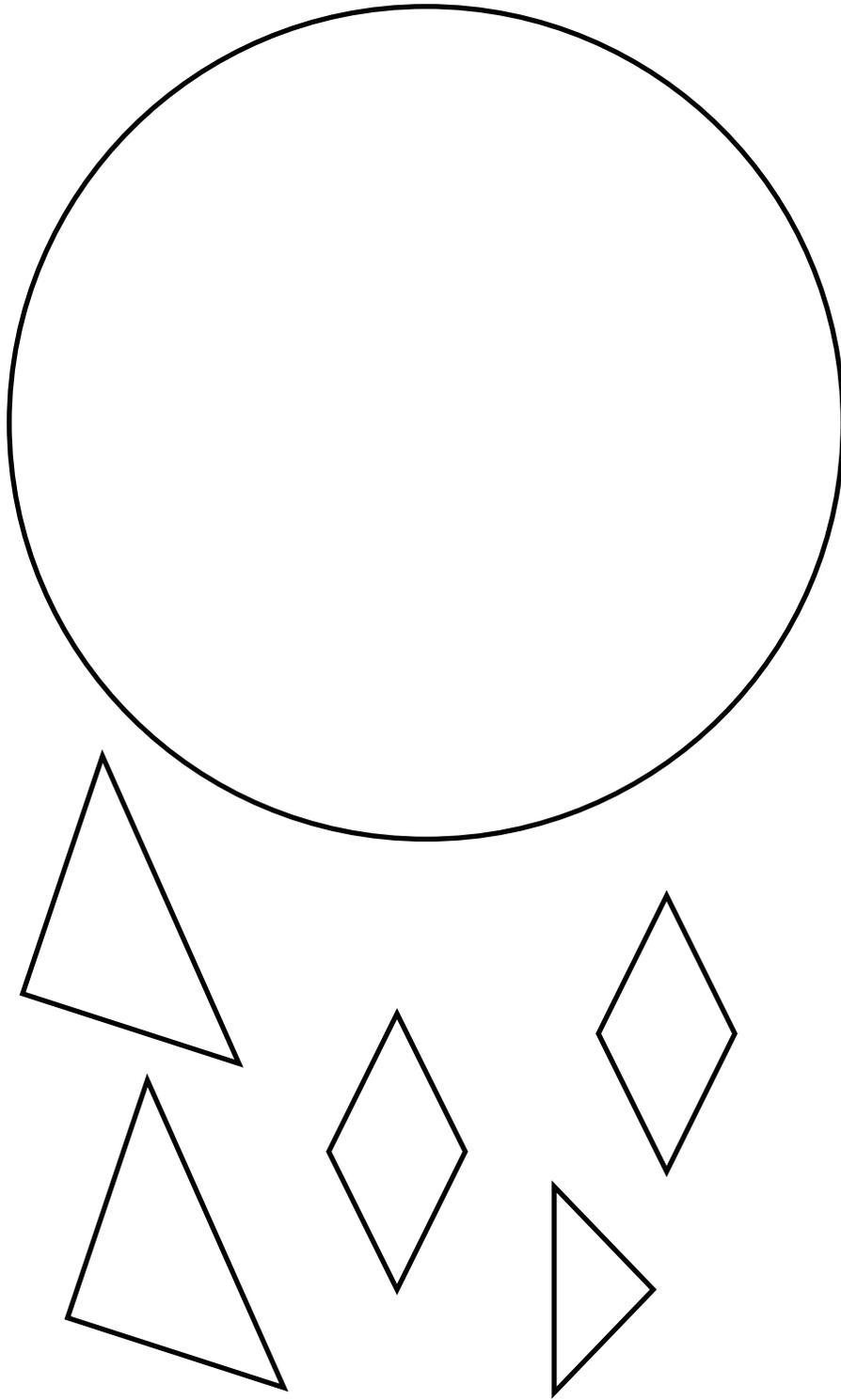
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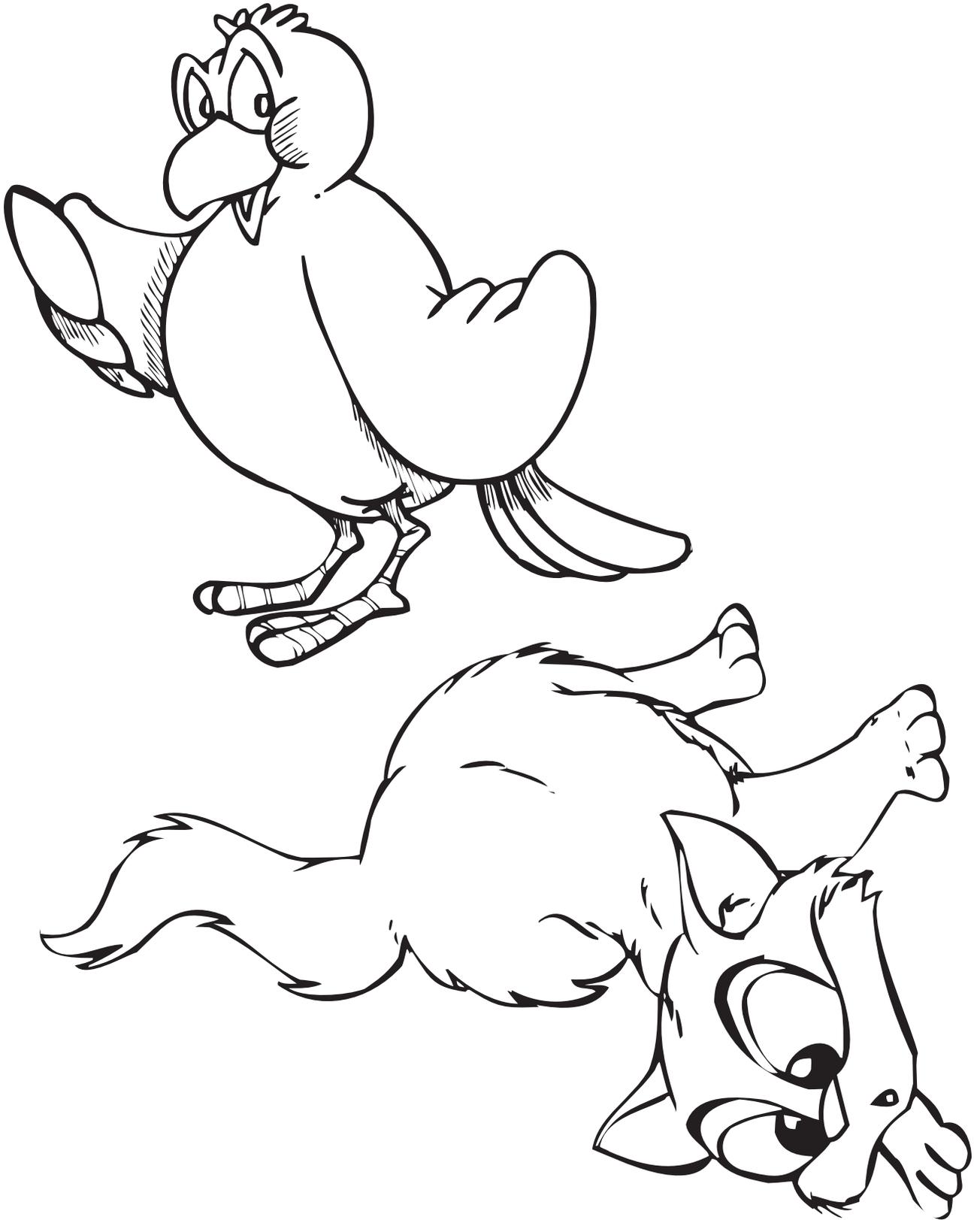
The End!

A baby cat is called a

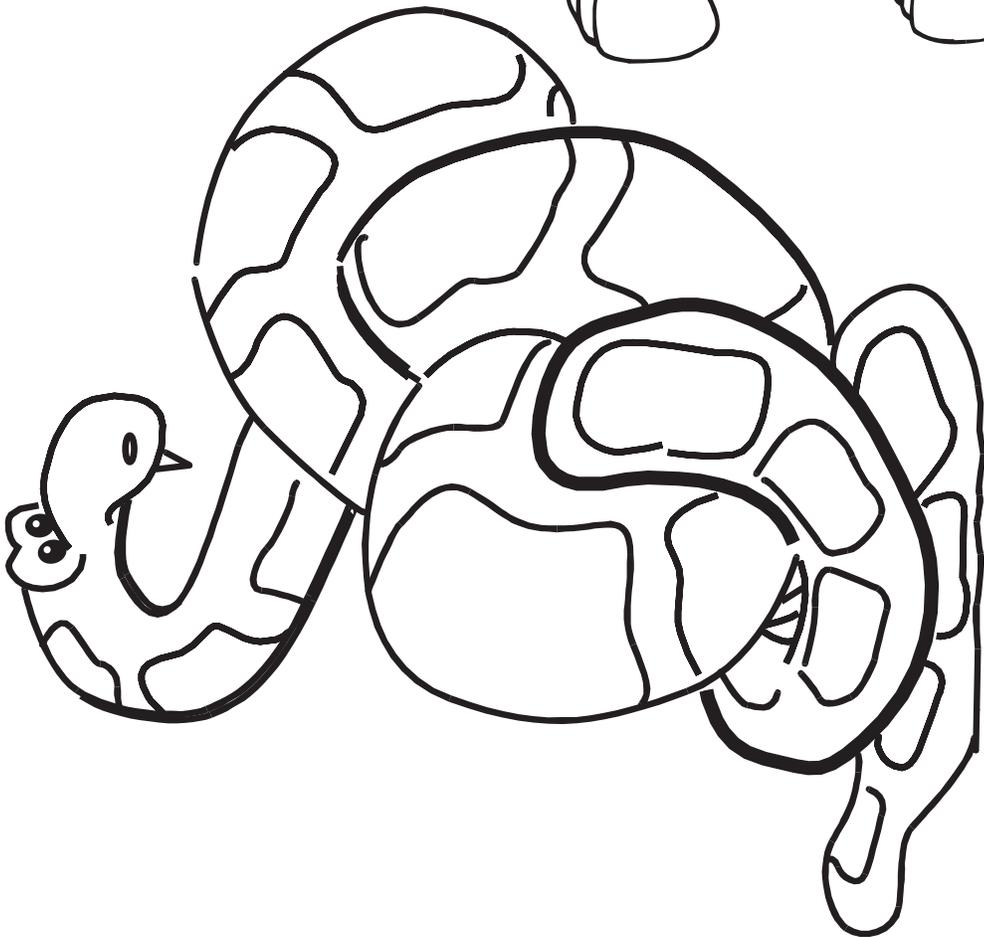
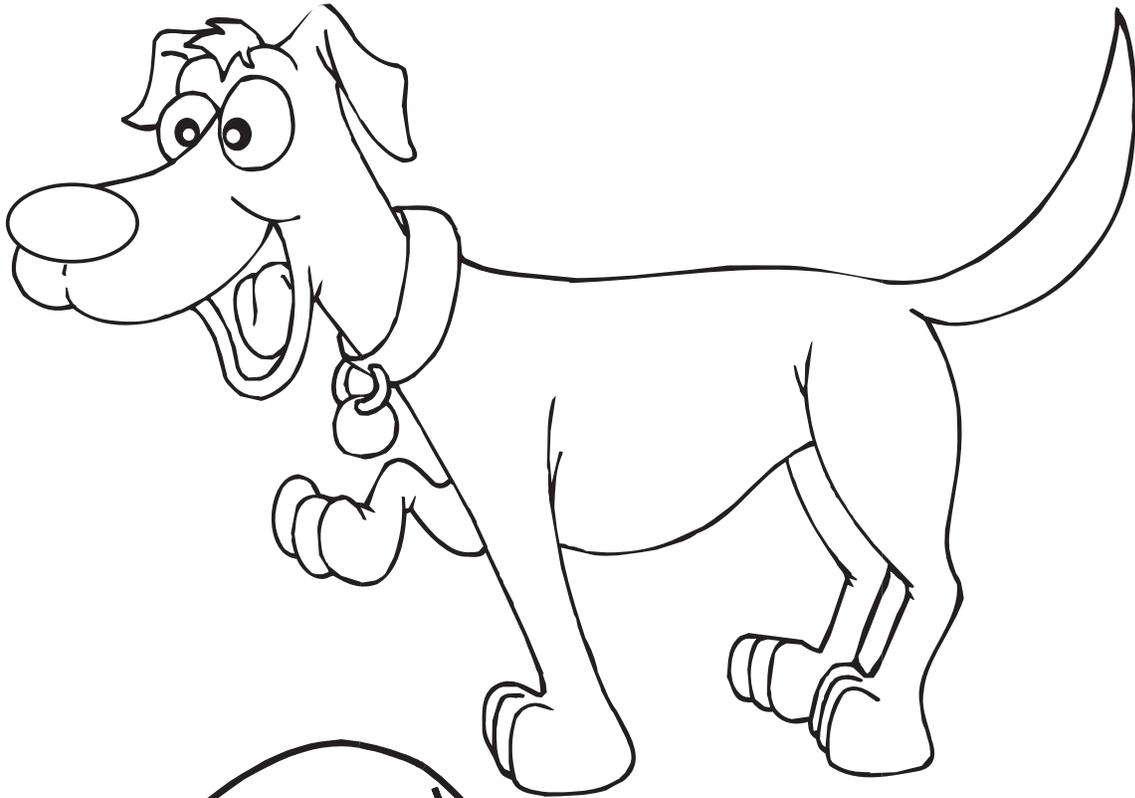
Cat Book Cover



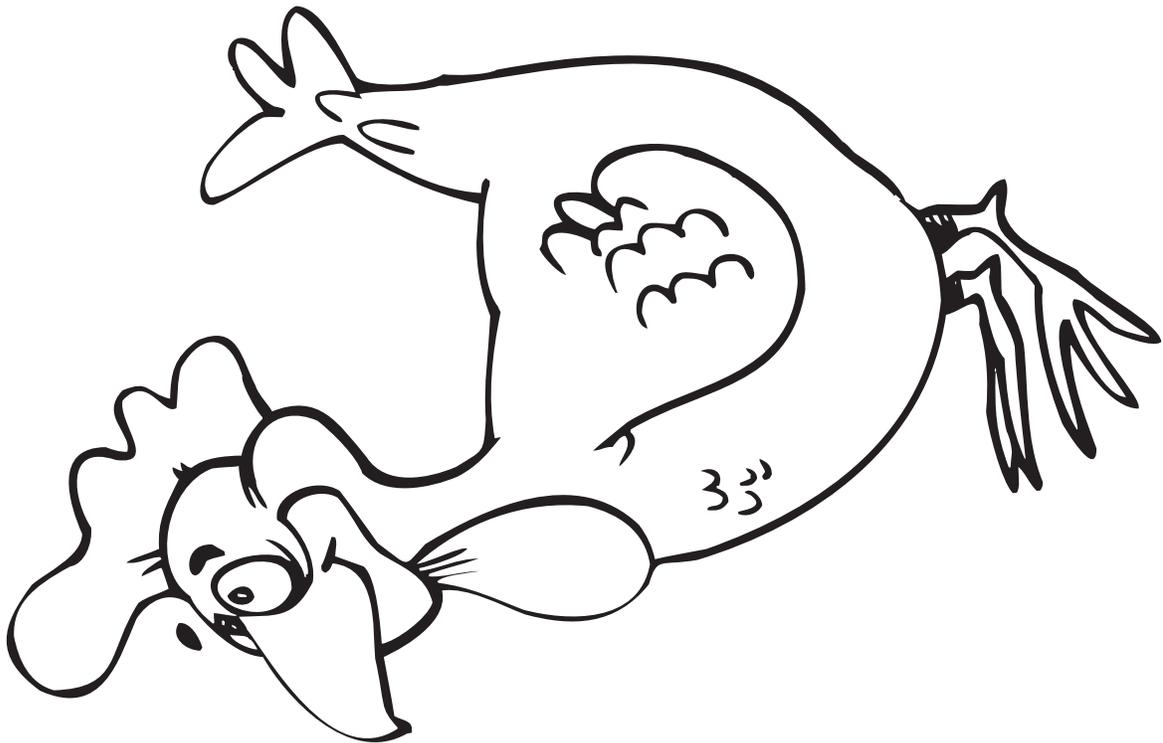
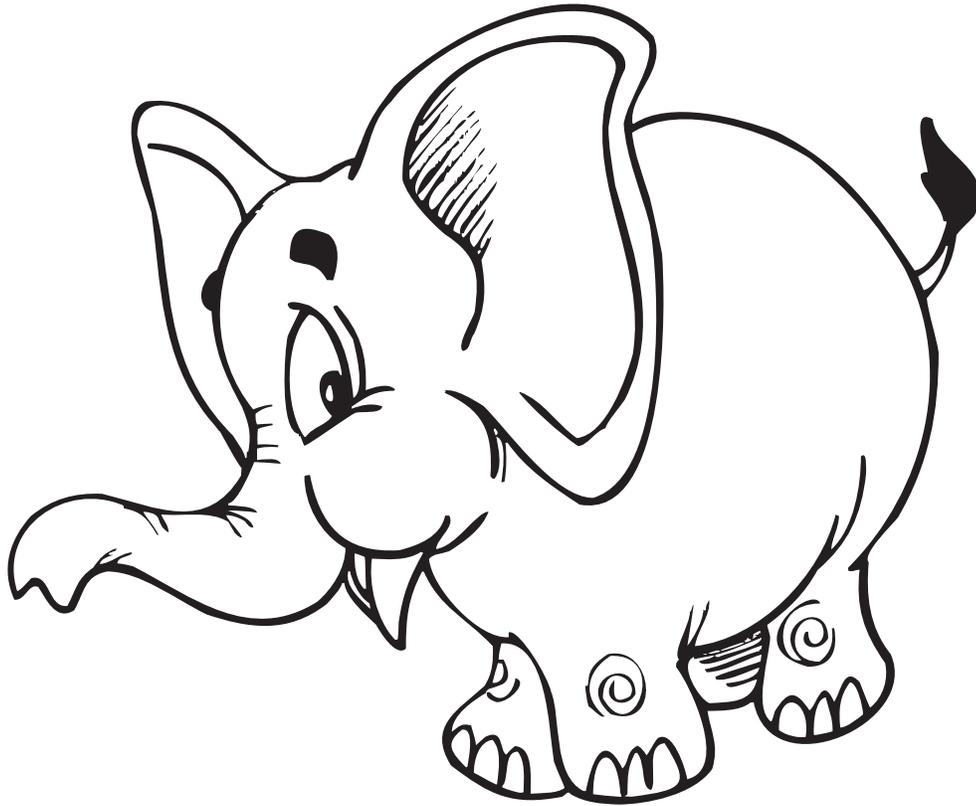
Animal Pictures



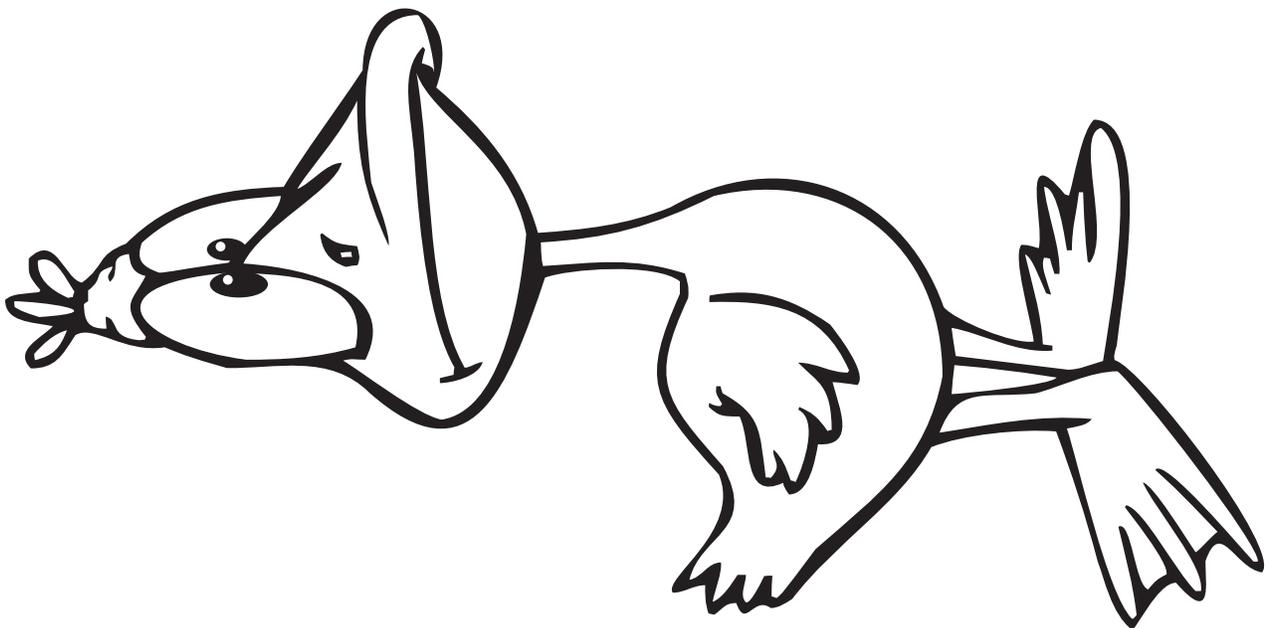
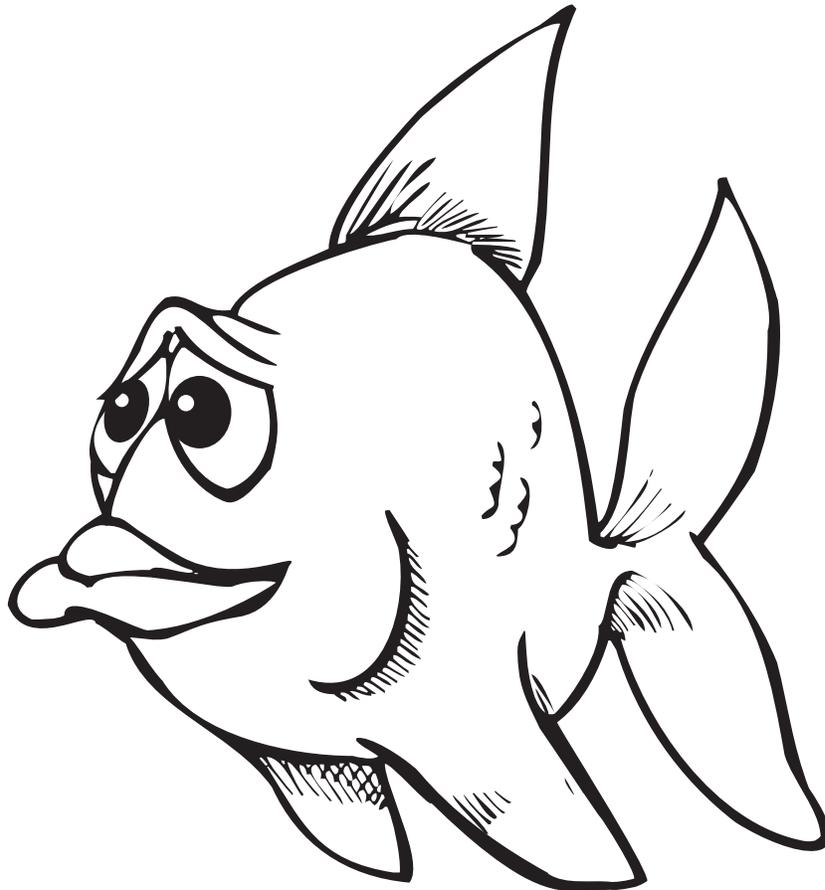
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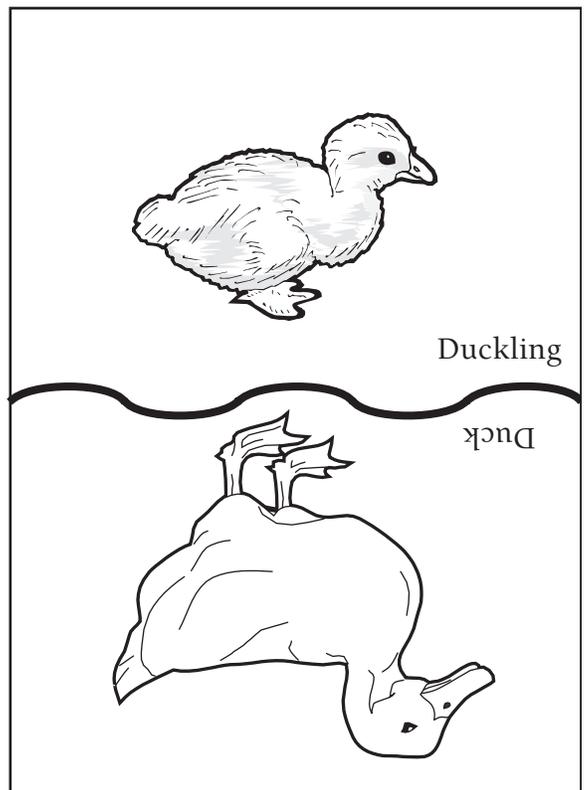
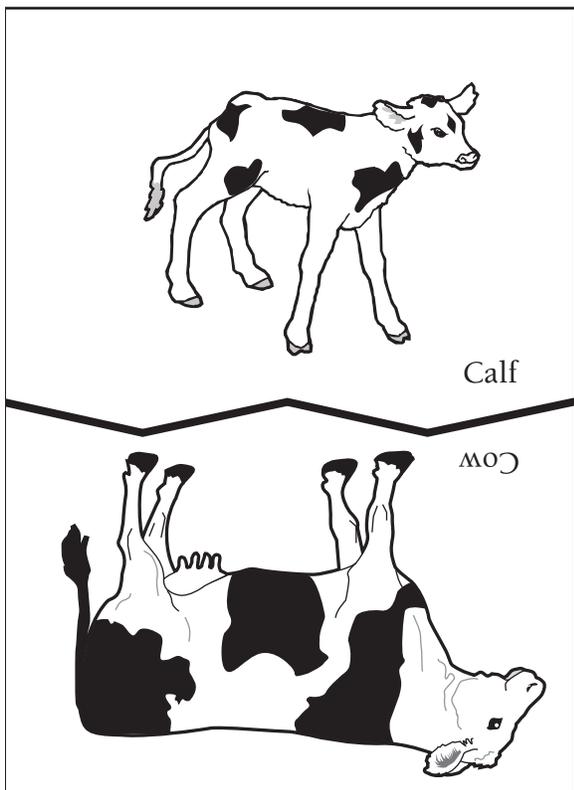
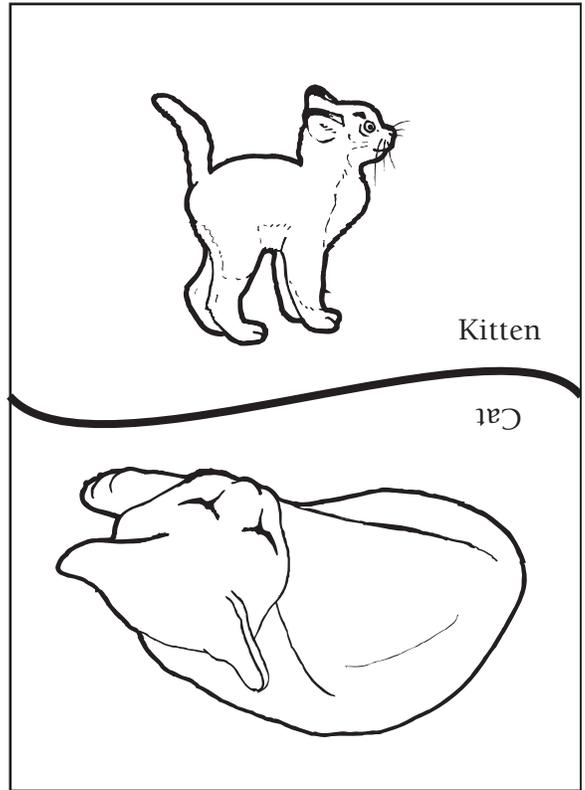
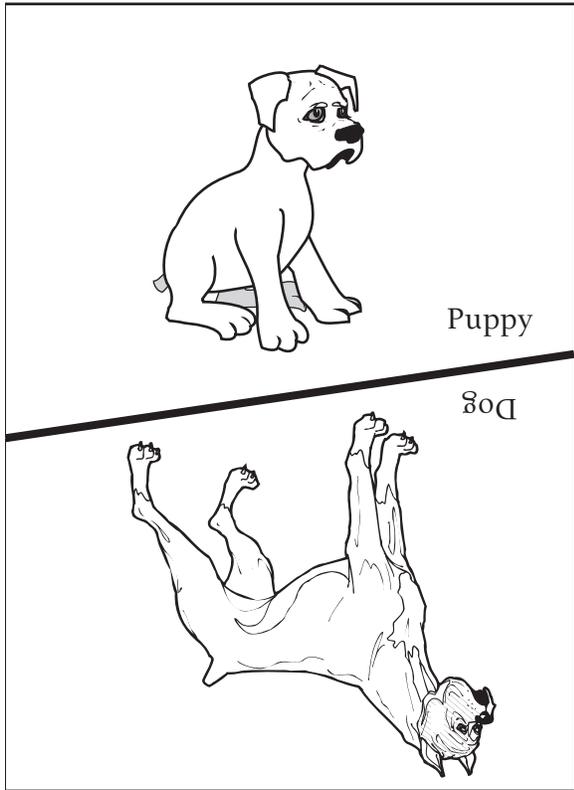
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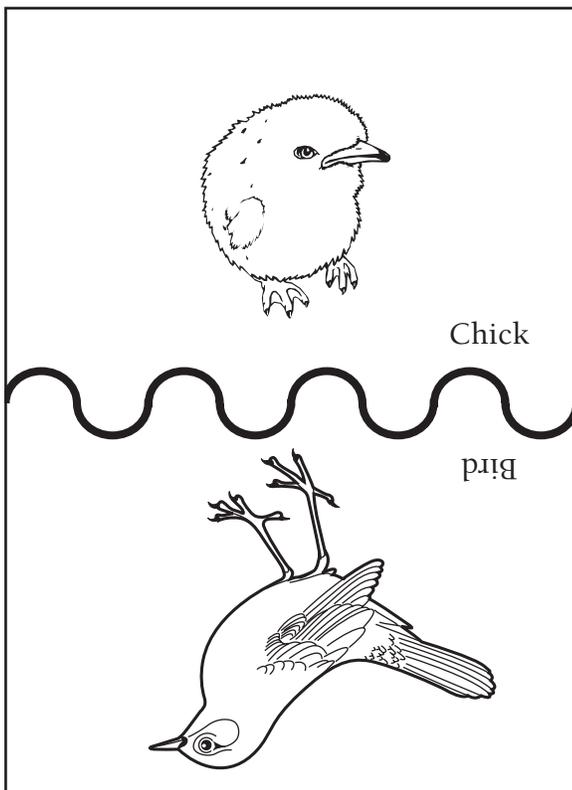
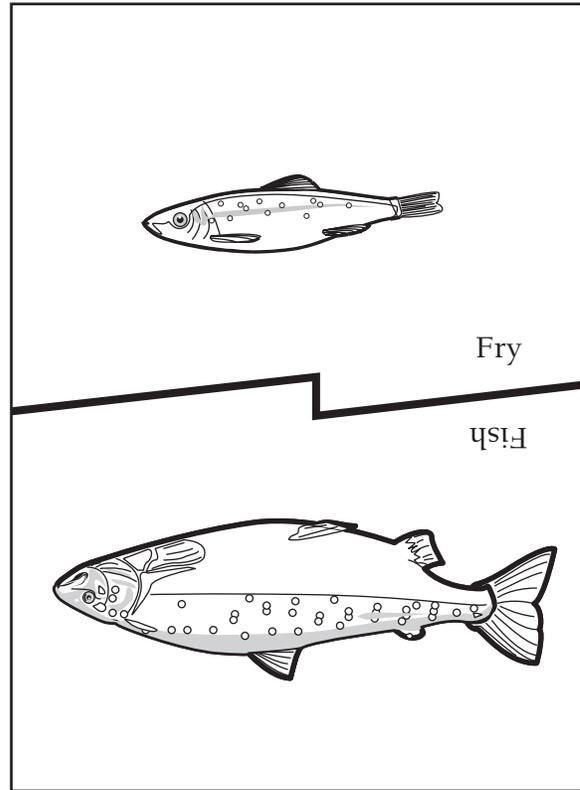
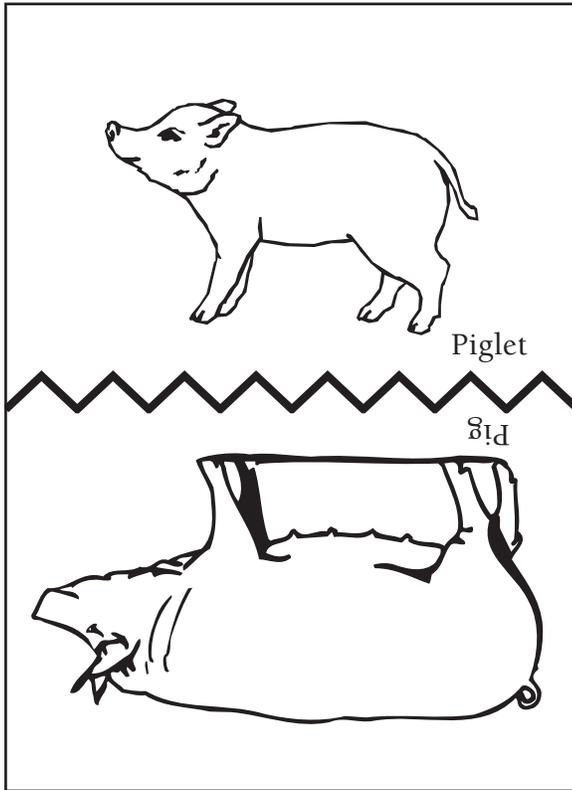
Animal Pictures



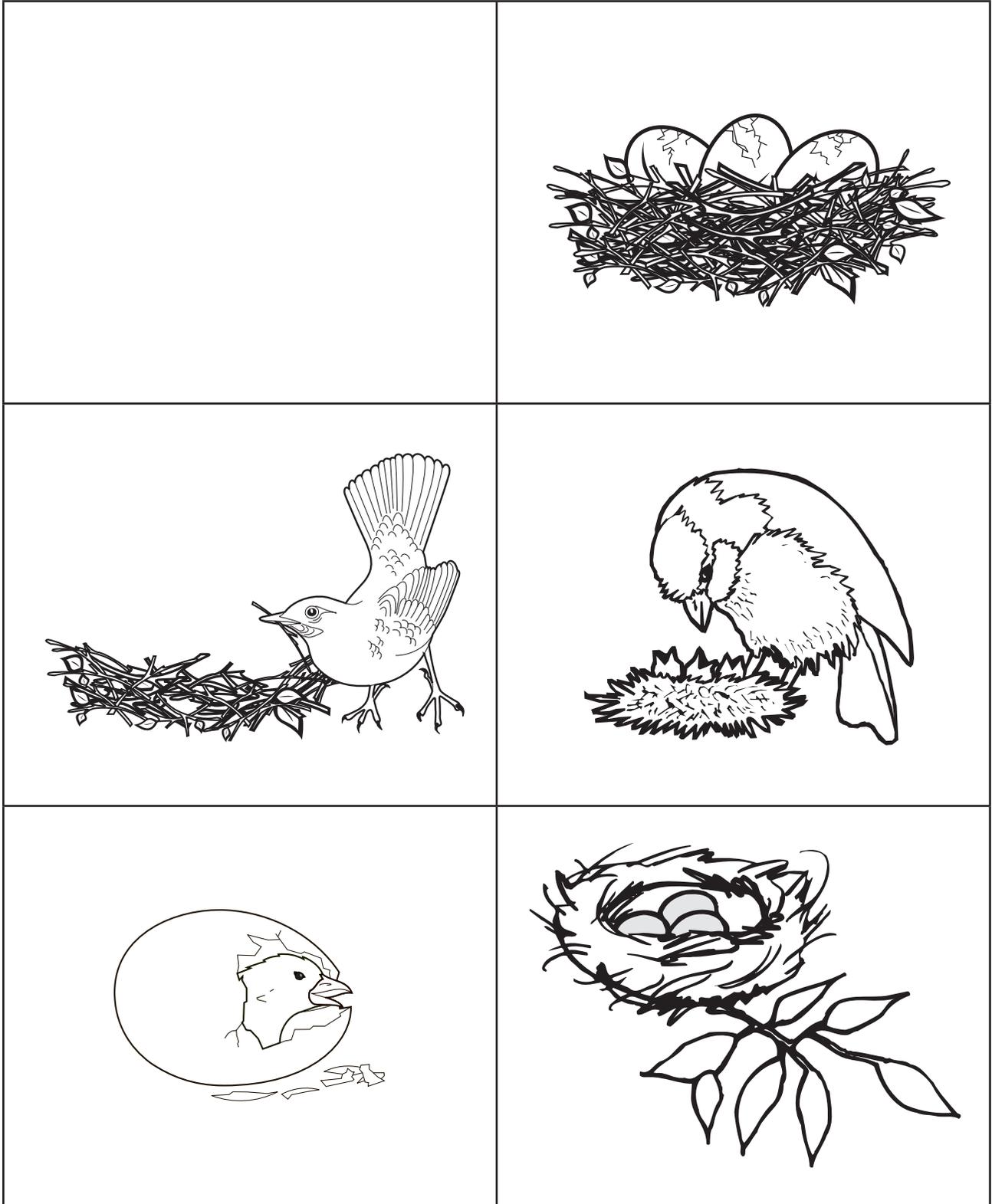
Adult and Baby Animal Matching Cards



Adult and Baby Animal Matching Cards



How an Egg Hatches



Camp Paws and Claws & Farm Animals

Content
Standard
III

Objective
2

Connections

<p>Standard III: Students will develop an understanding of their environment.</p>
<p>Objective 2: Observe and describe animals in local environment.</p>
<p>Intended Learning Outcomes:</p> <ol style="list-style-type: none"> 1. Observe, describe, draw, and compare familiar animals. 2. Describe how young animals are different from adult animals. 3. Observe and imitate the sounds and movements of animals with songs, dances, and storytelling. 4. Distinguish between real and make-believe animal behaviors.
<p>Content Connections: Language Arts I, II, III, V, VII, VIII</p>

Background Information

Camp Paws and Claws is a three-part activity that reinforces what students have learned throughout the year about animals. For this particular activity, students will learn about farm animals. They will learn about cows, pigs, hens, and ducks. Camp Paws and Claws provides several activities for students to earn badges for each animal. As the teacher, you can decide if students should complete all activities or only some.

Camp Paws and Claws can be done as a whole class or broken up into centers. If camp activities are broken up into centers, you should thoroughly explain each activity to the children. Also, you should provide written or picture instructions based on the needs of your students.

Prior to teaching Camp Paws and Claws, teachers should give an overview of the farm animals—ducks, pigs, cows, and hens. Students should be able to discuss realistic and unrealistic behaviors of farm animals, what adult and baby animals are called, identify and discuss various parts of farm animals, identify which animals live on a farm, and identify initial sounds of words.

Research Basis

Church, E. (2003). Scientific thinking: step-by-step. *Scholastic Early Childhood Today*. 6(4) 35-41.

In the primary grades, children are learning about science and the world. Science skills—observe, compare, sort, organize, predict, experiment, evaluate and apply are essential to their learning. It

is important for students to understand the process involved with experimenting in science.

LeVine, J. (2002). Teaching ideas: writing letters to support literacy. *The Reading Teacher*. 56 (3) 232-239.

The more students write the more proficient they become. A simple daily message can include daily activities or another message to the students will enable children to read some of the message early in the school year.

Invitation to Learn

Sing *Old McDonald Had A Farm* as a class. Discuss the various animals that can be on a farm and the sounds they make.

Instructional Procedures

Group students into four small groups or complete activities as a class. Each animal will have a tub with all materials necessary to complete the activities to earn the badge. Explain all activities to children prior to allowing them to go to the centers. In each tub keep an example so that students know what to do.

Cows

1. Have the students read the book *Click, Clack, Moo: Cows That Type*.
2. Make a cow puppet. On cardstock, print the Cow master and have students cut it out. Using a black Bingo marker, put the black spots on the cow. Attach the cow to a craft stick or a paper bag. When puppet is finished, have a group orally tell a story using their cow puppets. The story can have realistic and unrealistic cow behaviors.
3. Read, *Animal Babies*, the section on cows. In the tub have three-dimensional models of a mother cow and her baby. Have the students draw a picture of a cow and calf in their Science Journal.
4. When they are finished, they may cut out and color the cow badge and glue it to their vest.

Pigs

1. Have the students read the book, *Three Little Pigs*. Have the students as a group orally sequence the events in the story. Make sure they discuss the order in which the homes were built in and what materials were used to build the houses.

Materials

- Cow
- Three Little Pig Houses
- Hay or raffia
- Pretzel sticks
- Red construction paper
- Tubs
- Drawing paper
- Crayons
- Pencils
- Craft stick
- Animal Badges
- Paper vest
- Science Journals
- Student lab coats
- Black Bingo marker
- Cow models
- Large jar
- Marble
- Whipping cream
- Mrs. Wishy Washy Characters
- Brown paint
- Crisco
- Feathers



The teacher or another adult should be rotating the room and listening to the discussion of students to determine level of understanding.

2. The Little Pig House Activity. Decorate the three houses the pigs made and write what material the house was made from. The first house is made of hay and students use hay or raffia to cover the house. The second house is made of sticks and students will use pretzel sticks to cover the house. The third house is bricks and students will use red construction paper rectangles and a triangle to cover the house. In the pig tub the teacher should include the words: hay, sticks, and bricks on cards. Students will practice using initial sounds to determine which word goes with what house.
3. In *Animal Babies*, read the section on piglets. Have students orally identify the various parts of a piglet with a friend.
4. When all activities are complete, the children may color and cut out their pig badge.

Hens

1. Read the book, *Little Red Hen*. Orally discuss with a friend ways they can be helpful at home and school.
2. Make butter. This activity needs an adult present and should be done as a whole class. Have the students put on their “lab coats”. Lab coats are men’s long sleeve dress shirts (or even short sleeved will work). Have the students use their science journals to determine what would happen if they mix cream and a marble in a jar. Have the students either draw a picture or write in their science journals what they predict will happen. Discuss with the students what cream is and where it comes from. The process of making butter takes 20-30 minutes. When the butter is finished, you will need to add salt to taste. Have the students all take turns and shake the jar. Explain that you need everyone to help in order for it to be successful. If one person tried to do it their arms would get very tired. Then, discuss as a class how the little red hen could have had an easier time if all the animals had helped her.
3. Give students a piece of white and wheat bread to use to sample the butter with. Graph which they liked better using their name on a yellow post-it note. The graph can be drawn on the board and as a class discuss the results of your graph.
4. Have the students write a post card home telling their parents about making butter. Give each student a quarter sheet of

construction paper. On one side they will draw a picture about farm animals. On the other side they will tell their parents about making butter. Have them fill out their science journals again with their results if they were right or wrong about their predictions. This can be done with words or pictures depending on the ability of the student.

5. Students can then color and cut out their hen badge.

Duck

1. Read *Mrs. Wishy Washy*. As a group review the order of the animals in the story orally and with pictures.
2. Create a craft stick puppet for each animal. The puppet will be two sided. On one side the animal will be clean and on the other side the students will finger paint brown mud on the animal.
3. Have the students retell the events of the story with their puppets. They should show the correct side of the puppet while retelling the story.
4. Feather Science Experiment. This is an activity for the whole class and an adult is needed. If possible, collect feathers from ducks. Place the feathers in water and show how the feather does not absorb water. In the science journals have the students write or draw the reason they feel a ducks' feathers do not get wet when in water. Tell the students that duck's feathers have a special coating that allows them to stay dry. Take regular feathers and place them in water. The feathers get very wet. Allow the students to use Crisco to cover the regular feathers to simulate the protective coating and place the feathers in water. Allow them time to explain what they learned to you. Have them record their results in the science journal.
5. When finished, have the students color and cut out their duck badge.

Assessment Suggestions

- Collect and assess science journals at the end of the day.
- Have the students retell the story of *Mrs. Wishy Washy* using their puppets.
- Observe students and their reactions as you complete the Duck Feather Experiment. Ask questions to determine understanding and thinking during the process.

- Discuss various farm animals with the students and have them tell you what they have learned.

Curriculum Extensions/Adaptations/Integration

- Have them write sentences or phrases in their science journals instead of just pictures.
- Pair up an advanced student with a student who struggles to provide them assistance.
- Each animal includes several activities. As a teacher you can decide to do all activities or select one that you feel would be best for your students.

Family Connections

- Have the parents write a postcard to their child to bring back to school the next day. The children will be taking home a postcard about making butter, and their parents write them a note and bring it to school the next day.
- Retell the story of Mrs. Wishy Washy.
- Have them tell their parents about ducks' feathers and the coating that protects them from getting wet.

Additional Resources

Books

Click, Clack, Moo: Cows That Type, by Doreen Cronin; ISBN

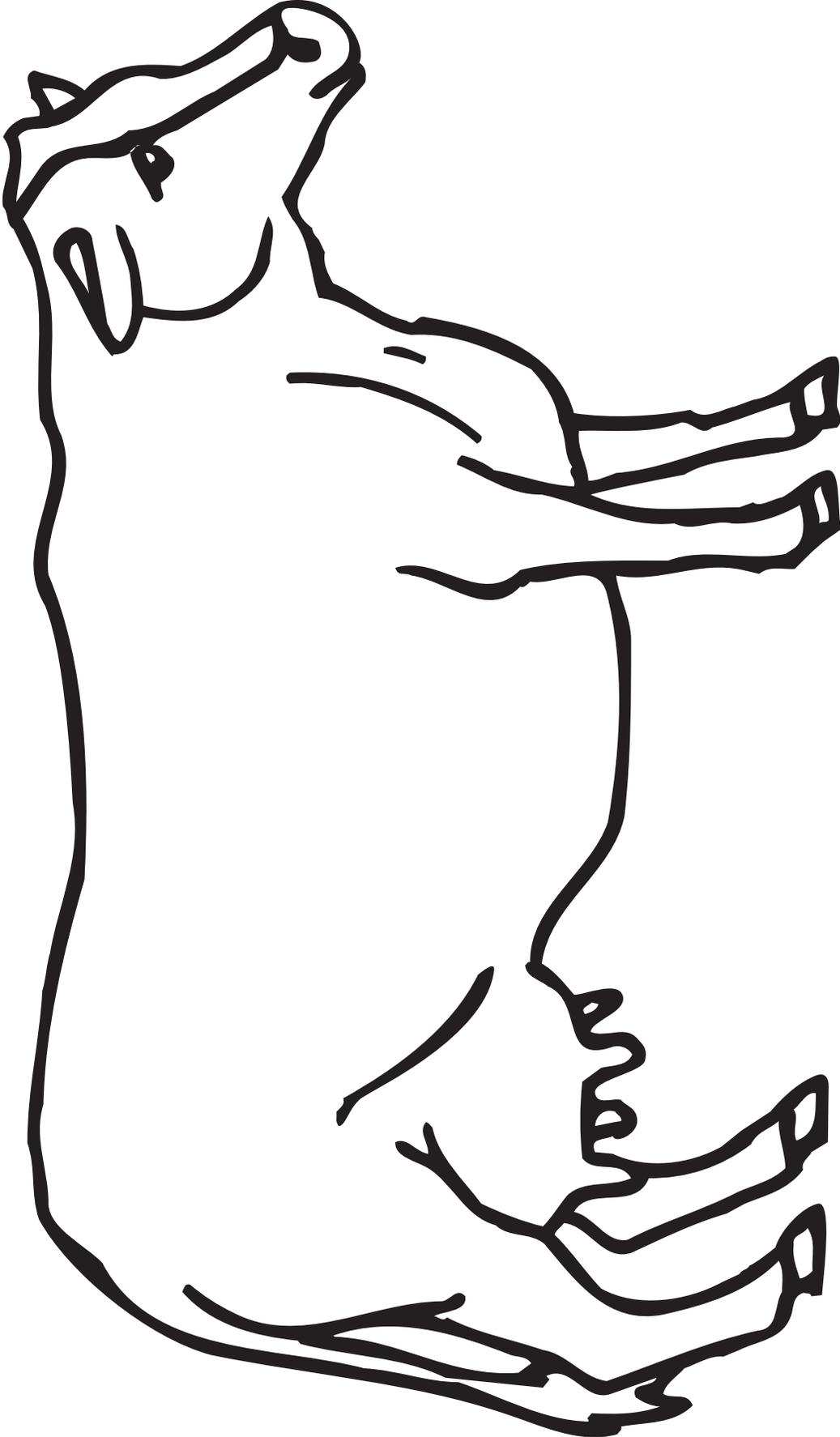
Baby Animals, by Angela Royston; ISBN 0689715633

The Three Little Pigs by Heather Amery; ISBN 0794506097

Little Red Hen, by Byron Barton; ISBN 0060216751

Mrs. Wishy Washy, by Joy Cowley; ISBN: 0780275764

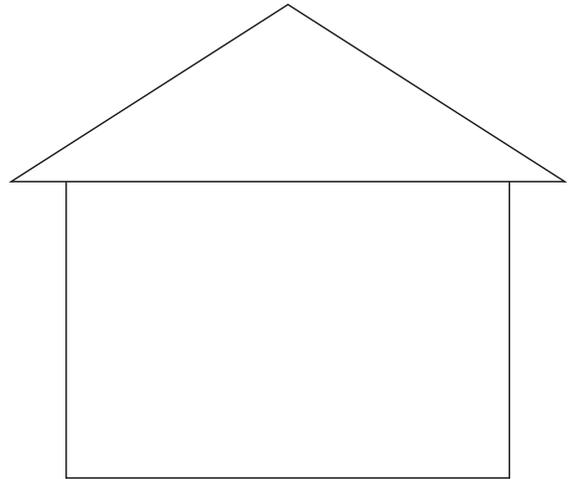
COW



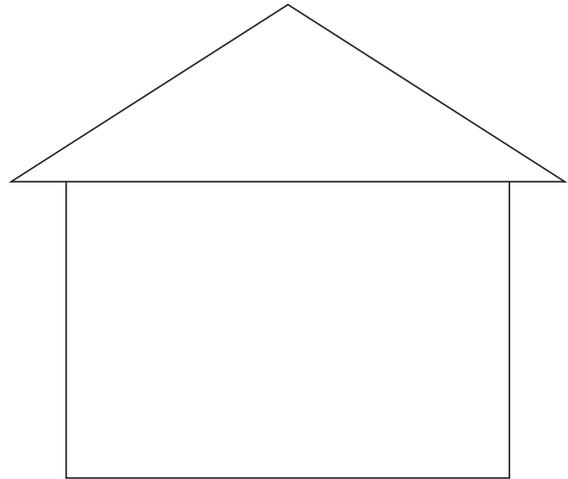
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Three Little Pigs Houses

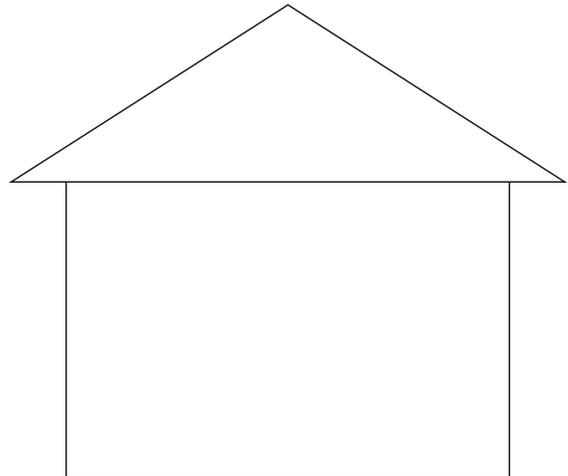
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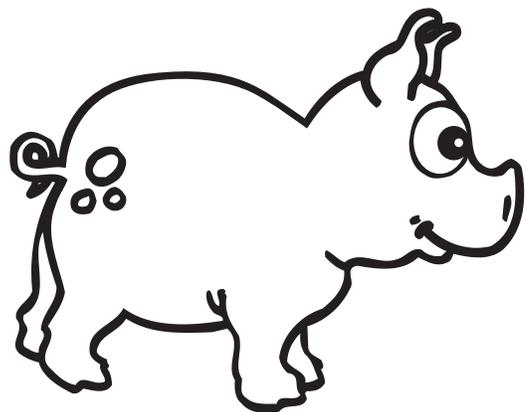
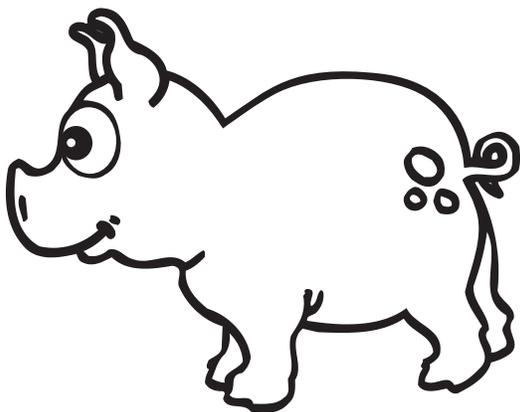
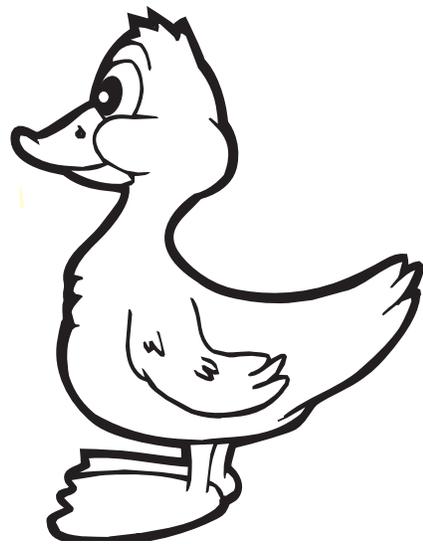
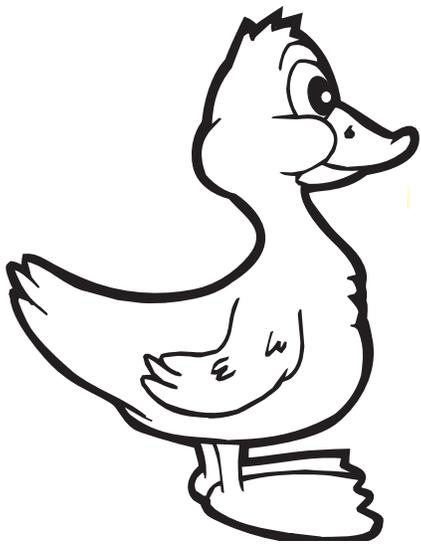
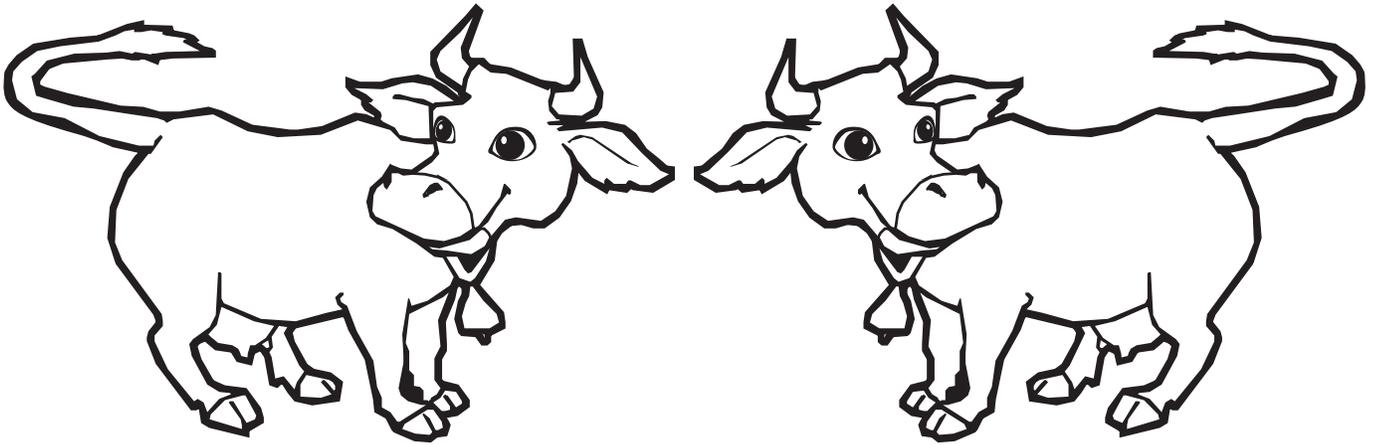
The second house was made out of



The third house was made out of



Mrs. Wishy Washy Characters

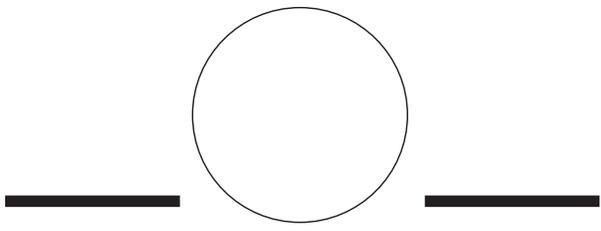
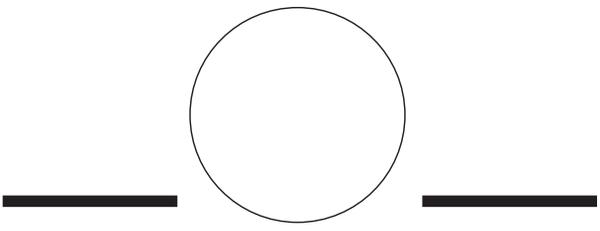
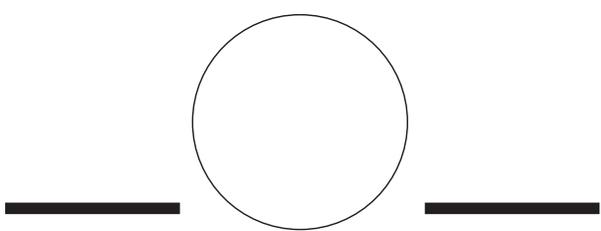
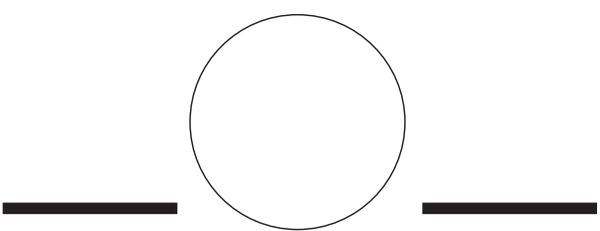
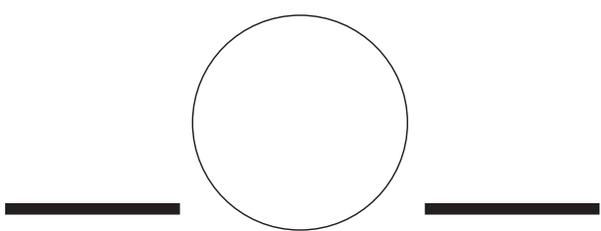
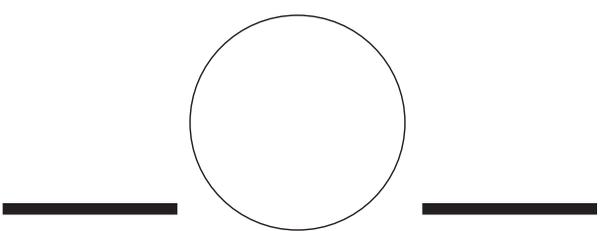
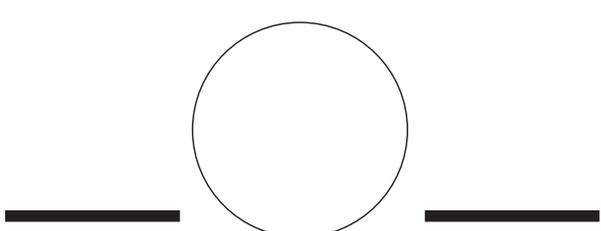
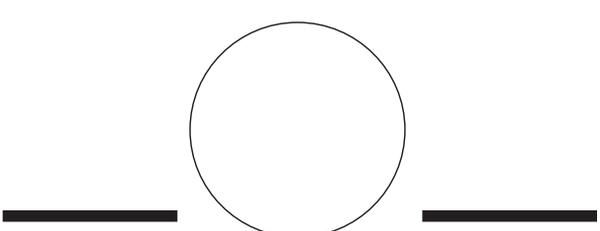
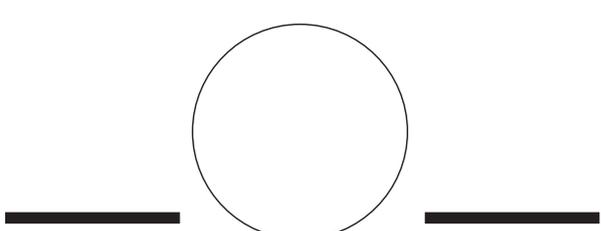
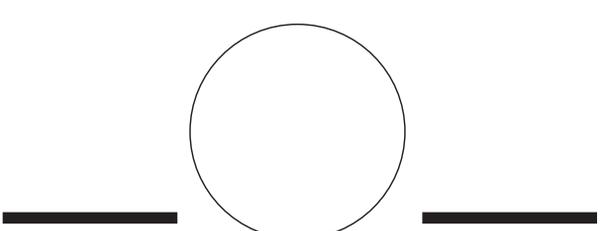


Appendix

Alligator More and Fewer

More/Fewer/Same

Number Stamp

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Ten Frame Recording Sheet

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Ten Frame

Ten Frame

Number Cards

0	1	2	3
4	5	6	7
8	9	10	

Number Cards

0	1	2	3
4	5	6	7
8	9	10	

Name _____

Ten Frame Recording

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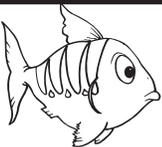
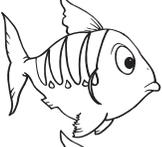
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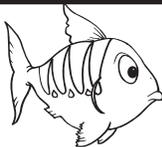
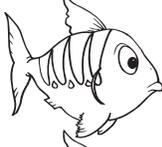
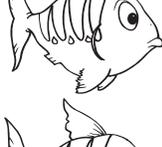
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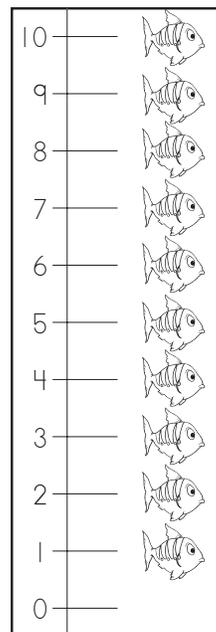
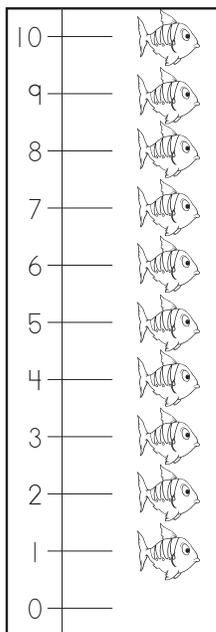
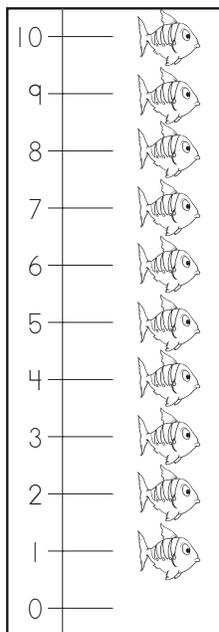
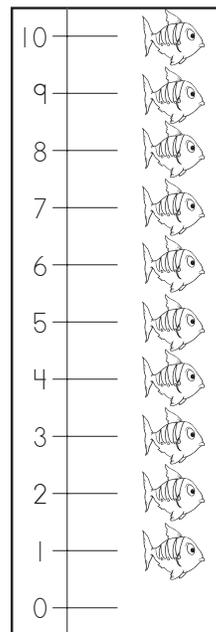
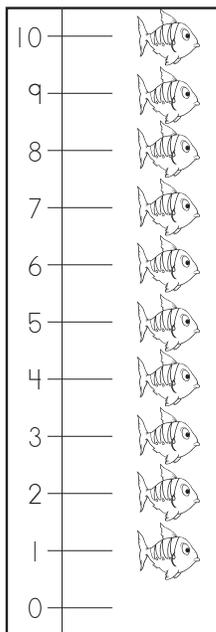
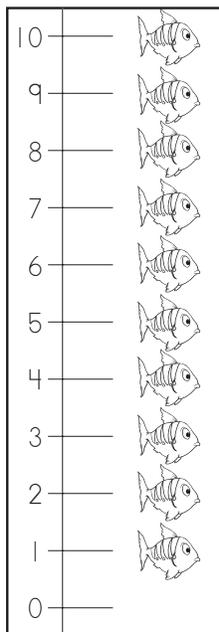
Fish Number Line

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Name _____

Fish Number Line Recording



Fish Graph

Fish Graph Recording

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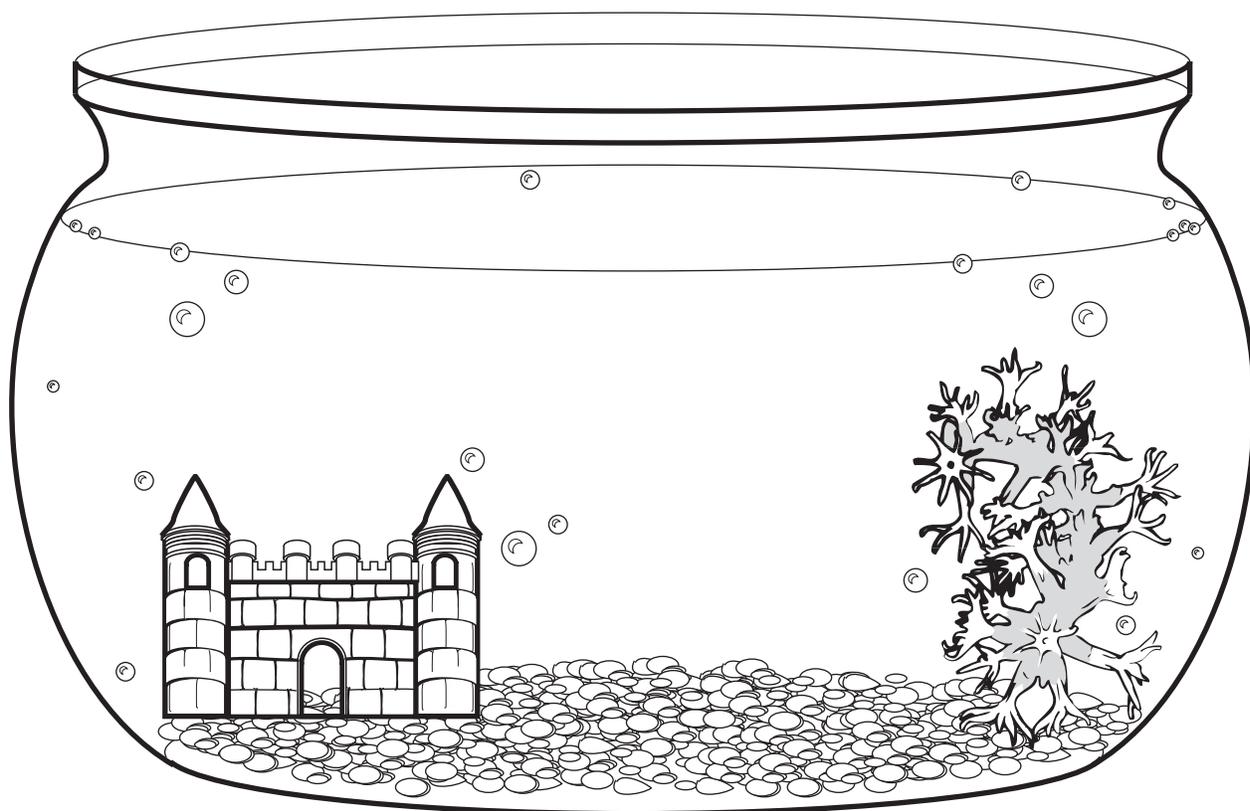
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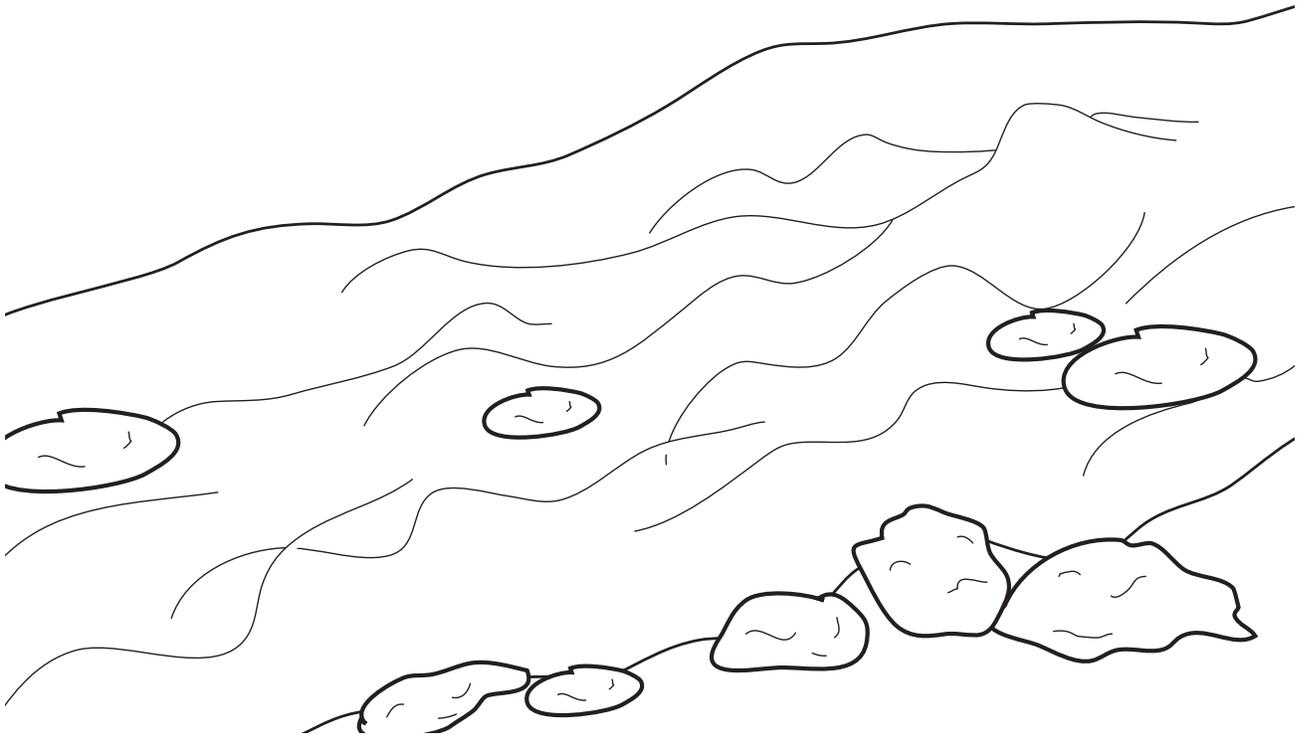
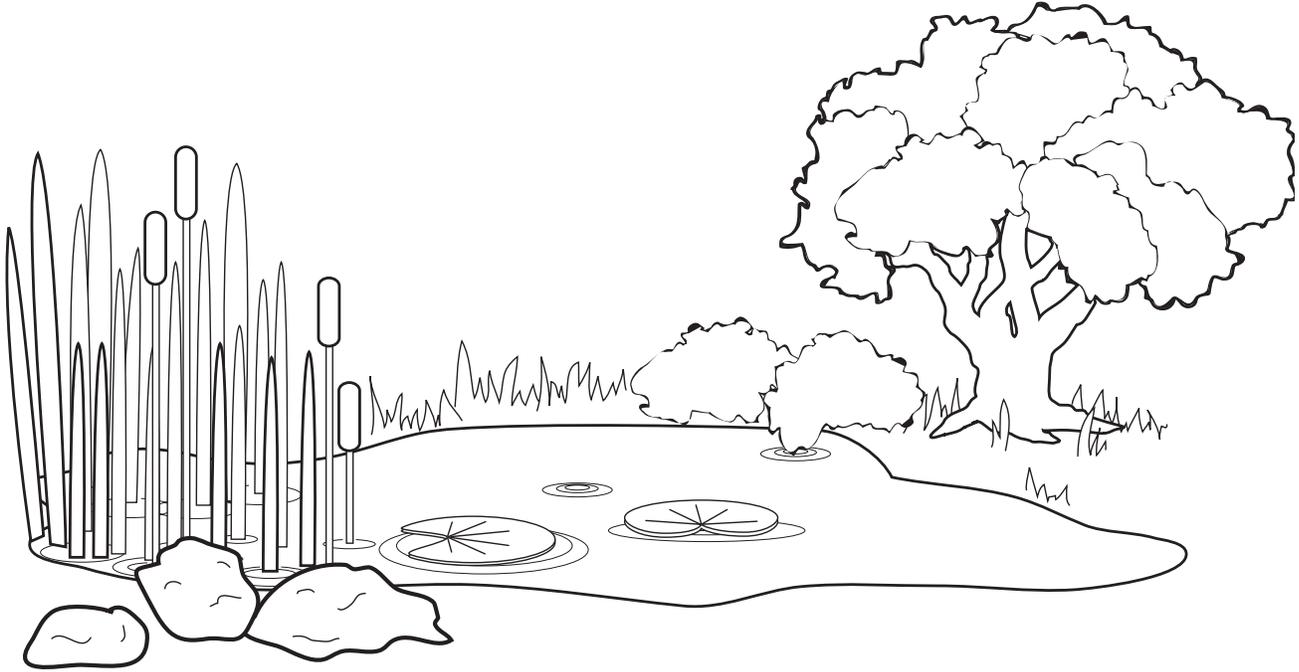
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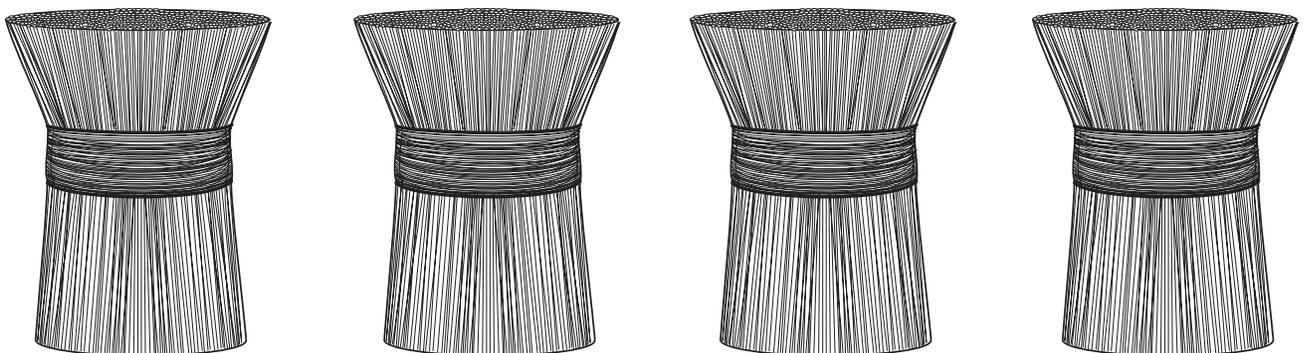
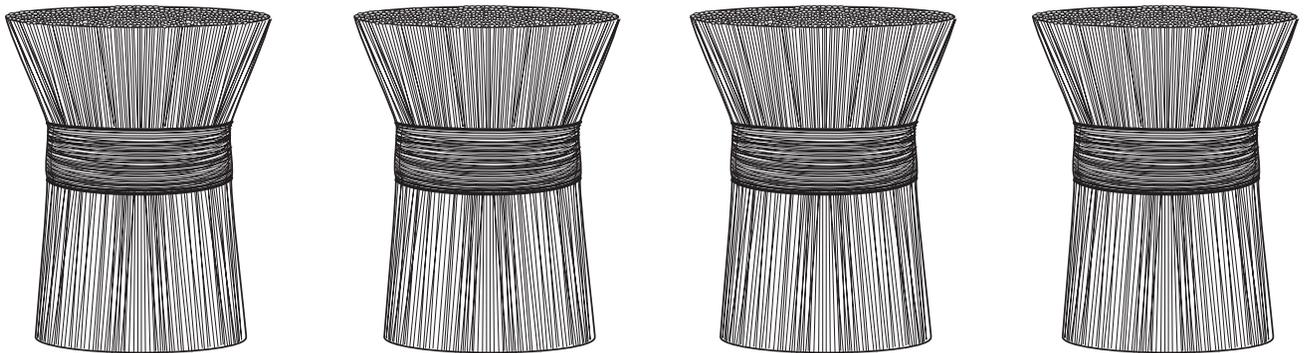
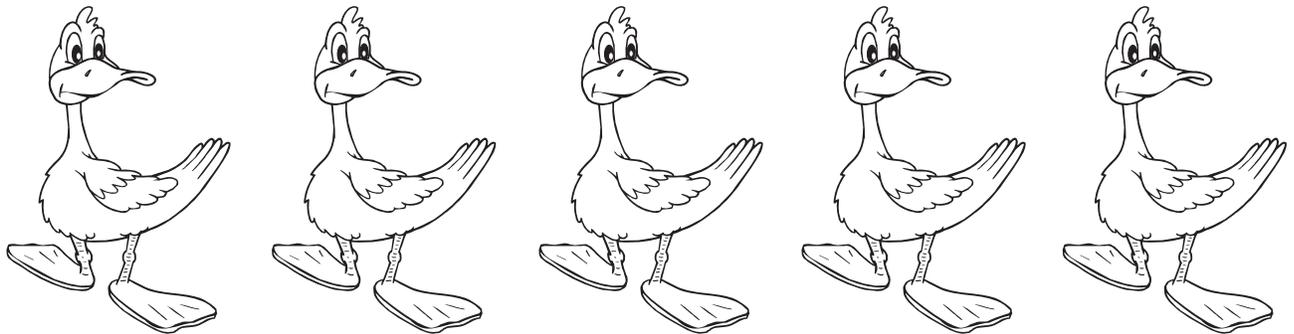
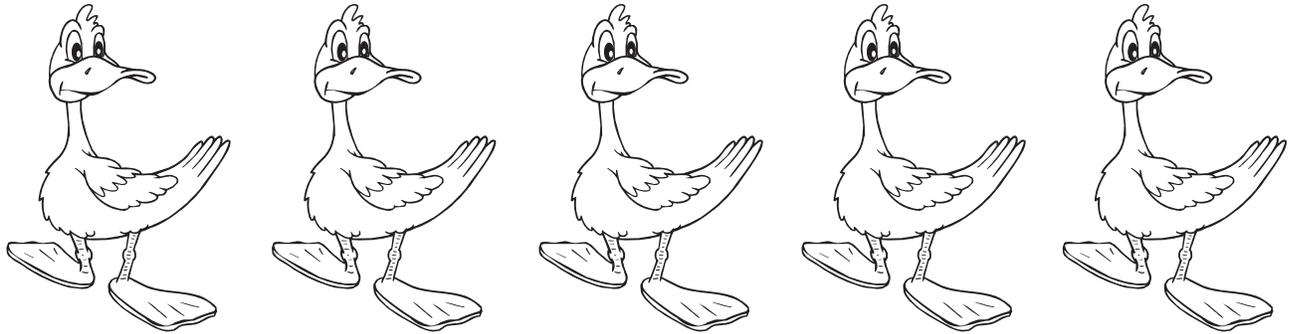
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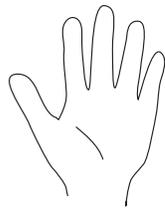
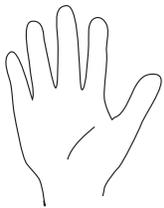
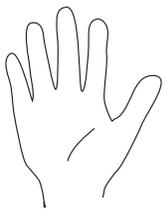
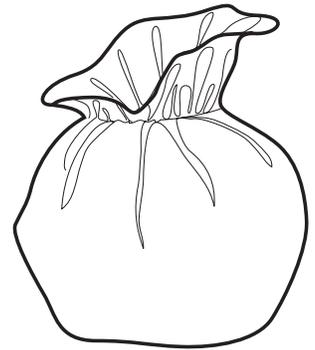
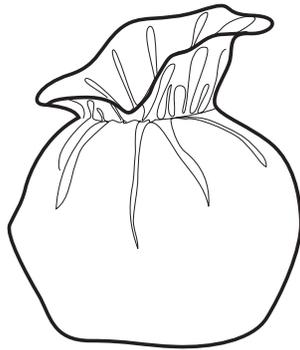
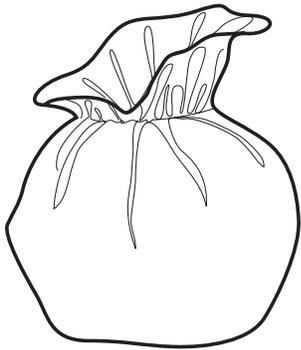
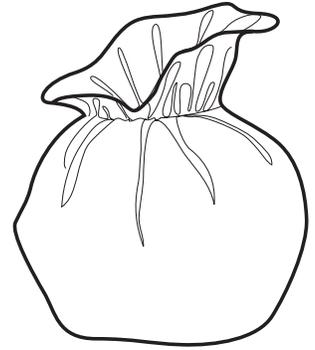
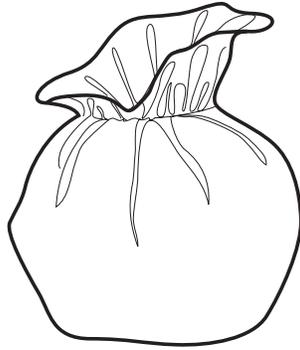
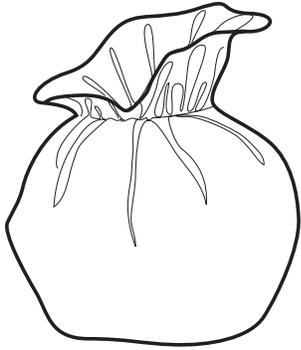


Fish Storyboards



Double the Ducks Cutouts

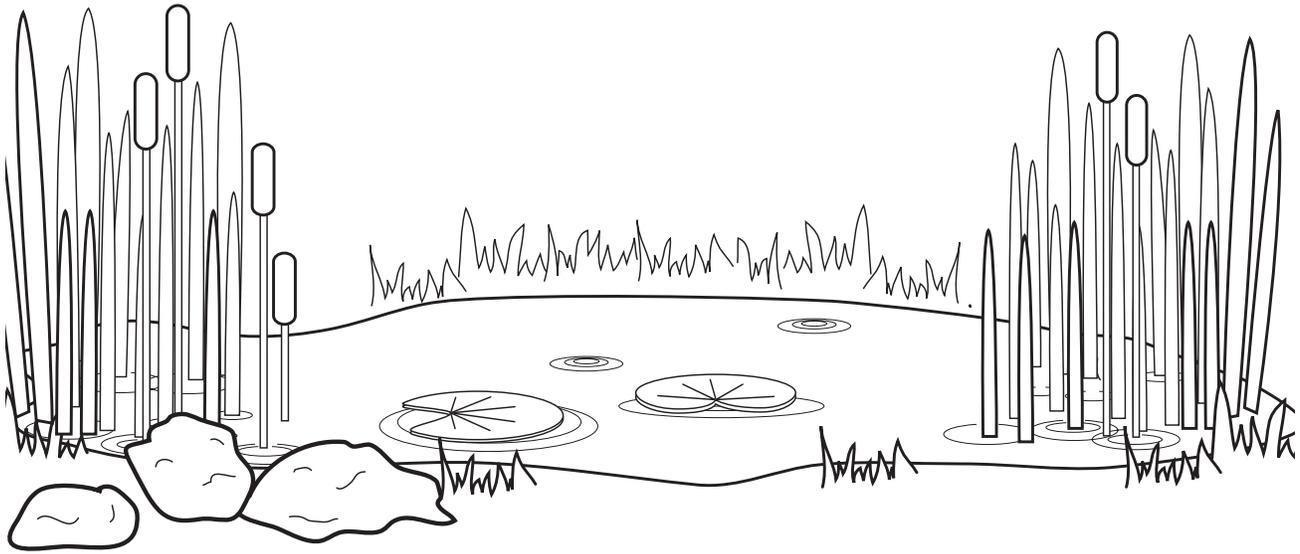




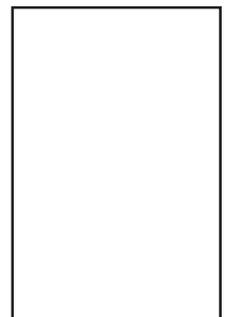
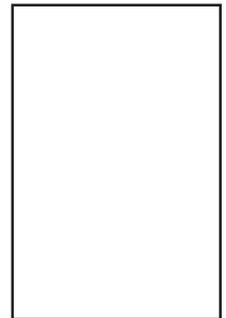
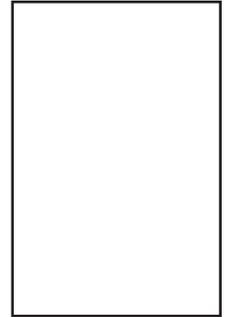
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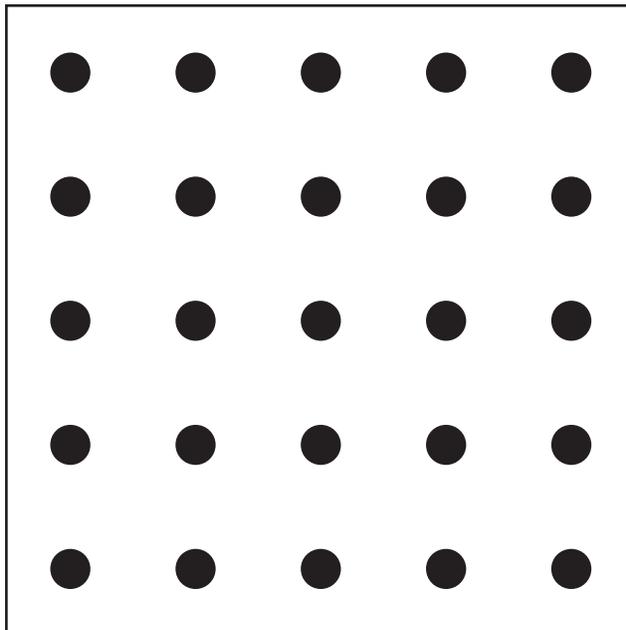
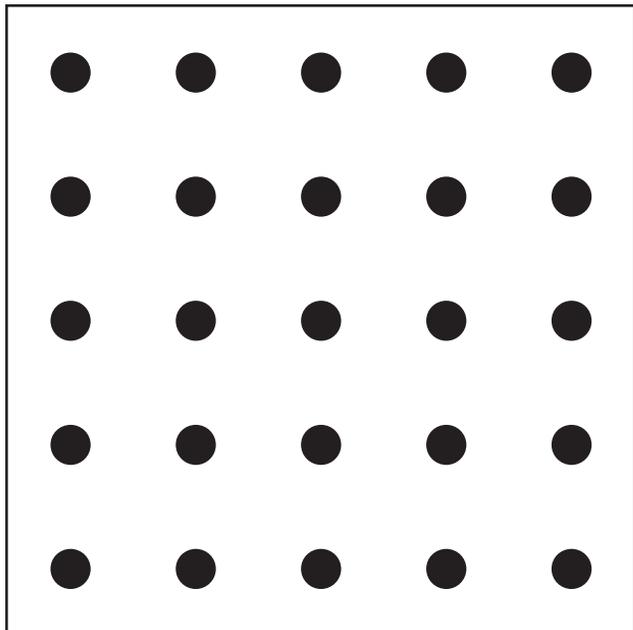
Duck Storyboard



Doubled Duck Match Recording

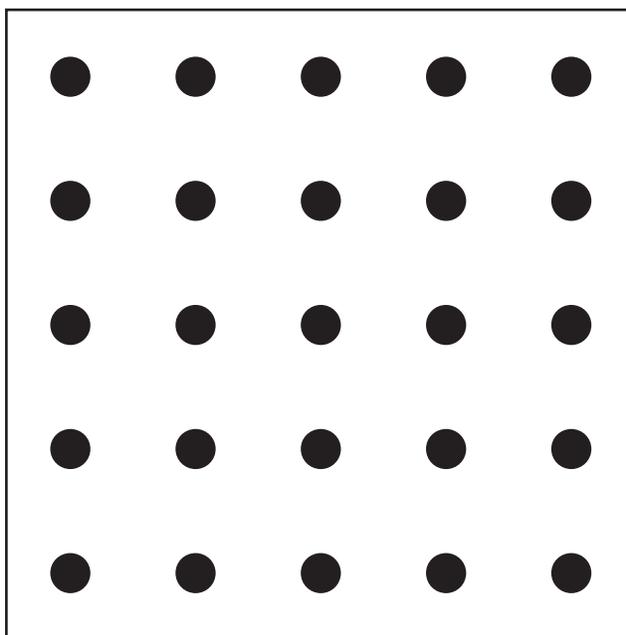
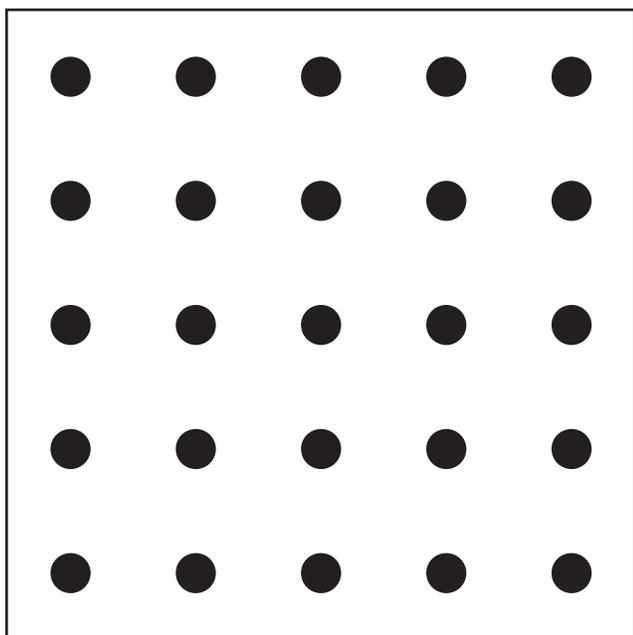


Geoboard Doubles Recording Sheet



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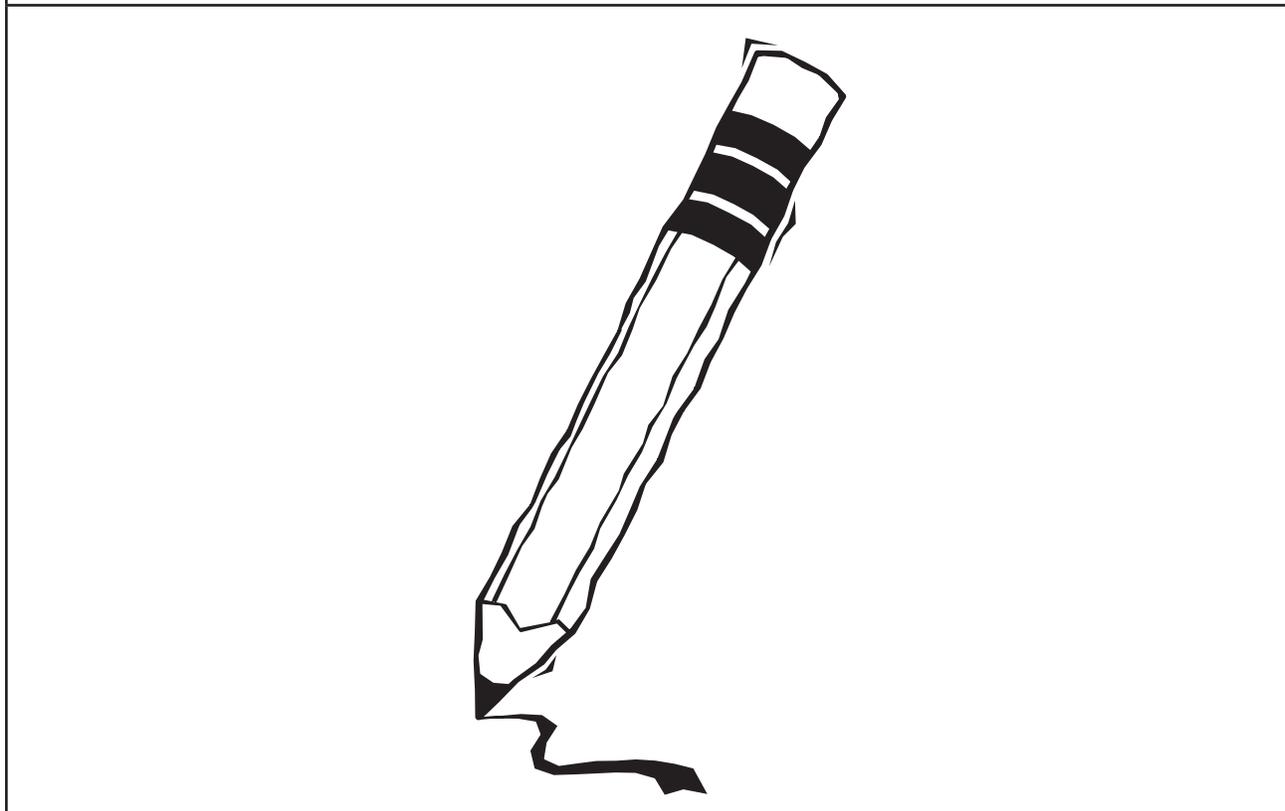
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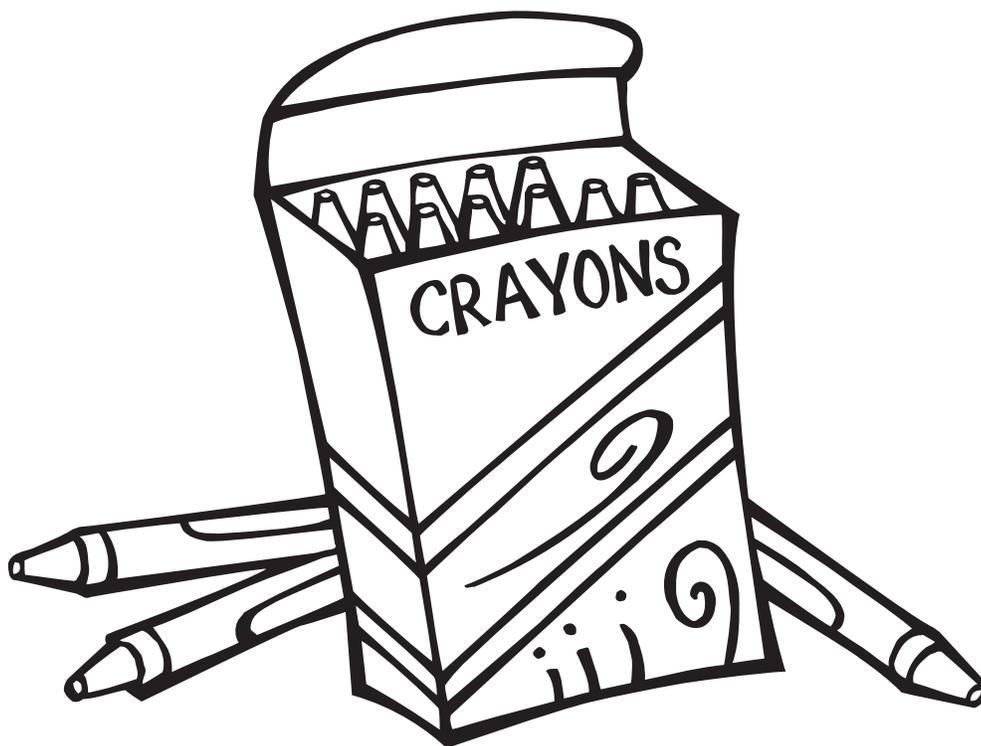
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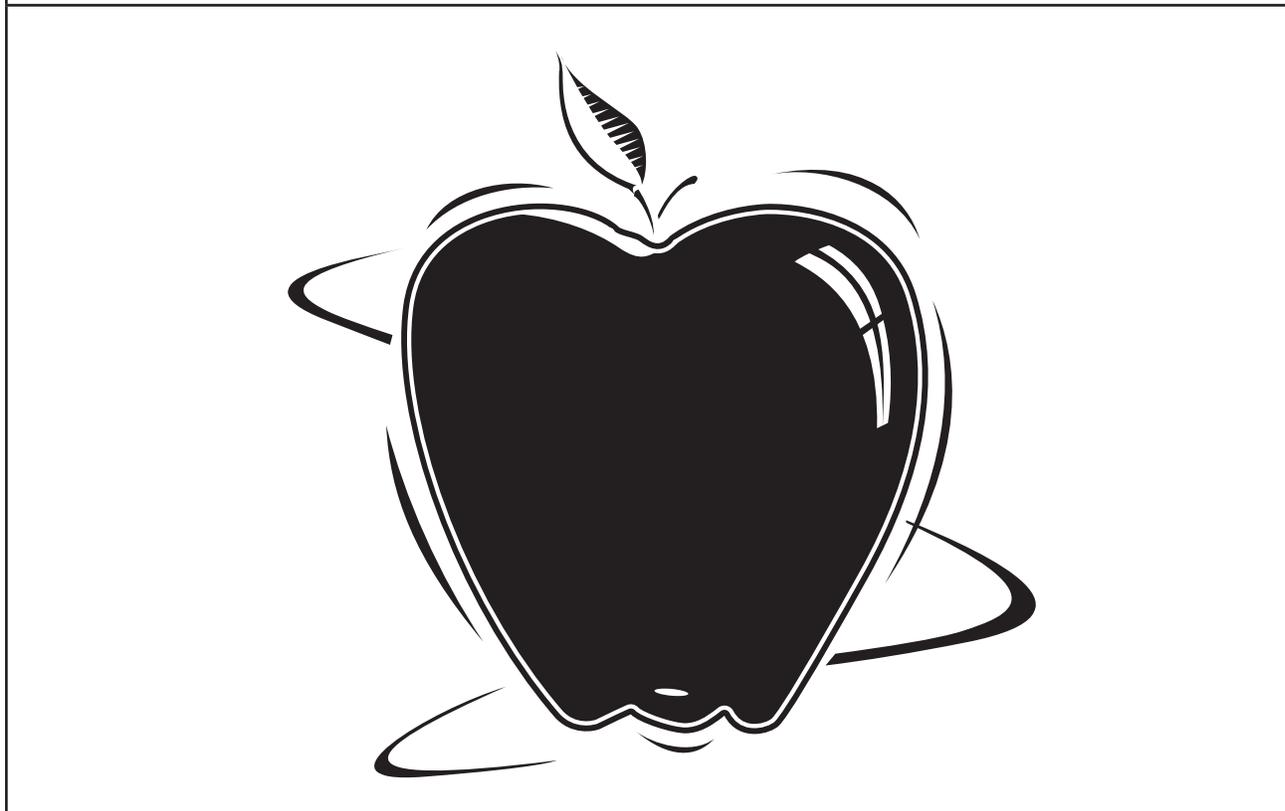
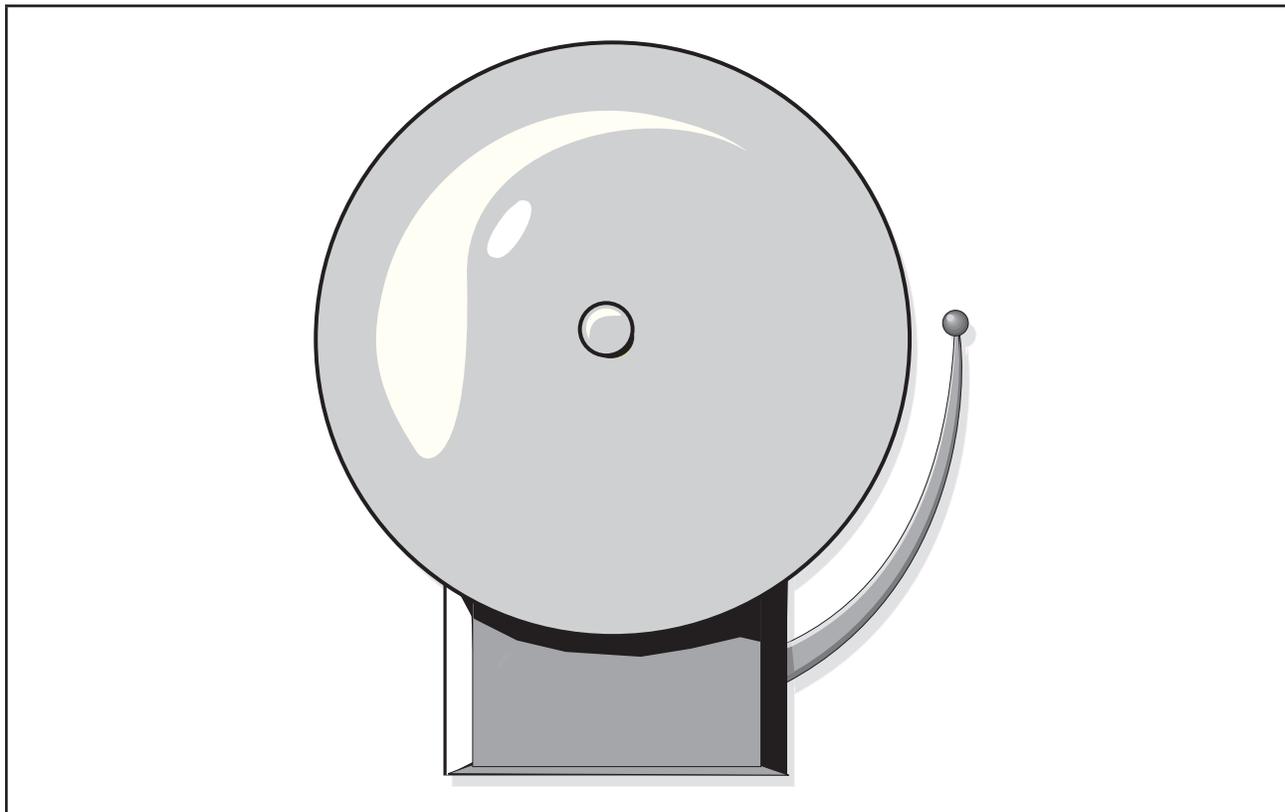
Picture Cards



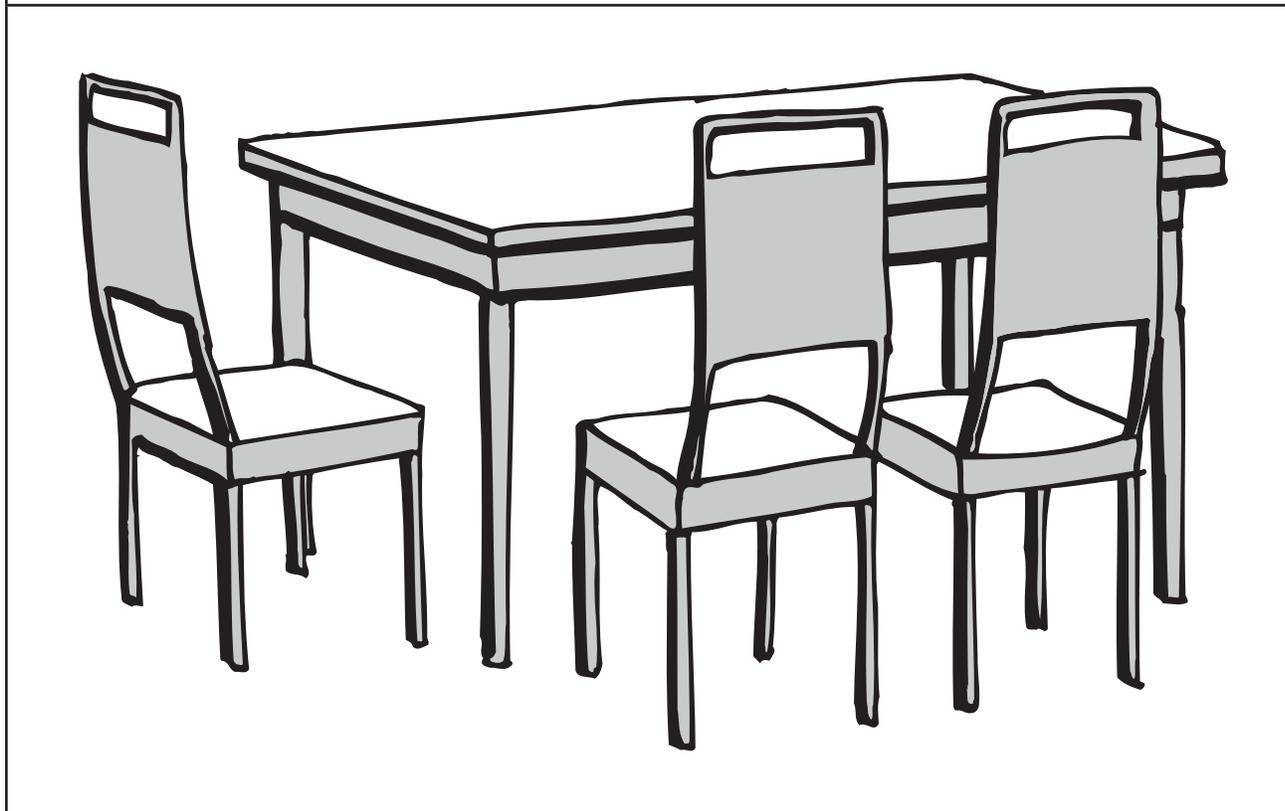
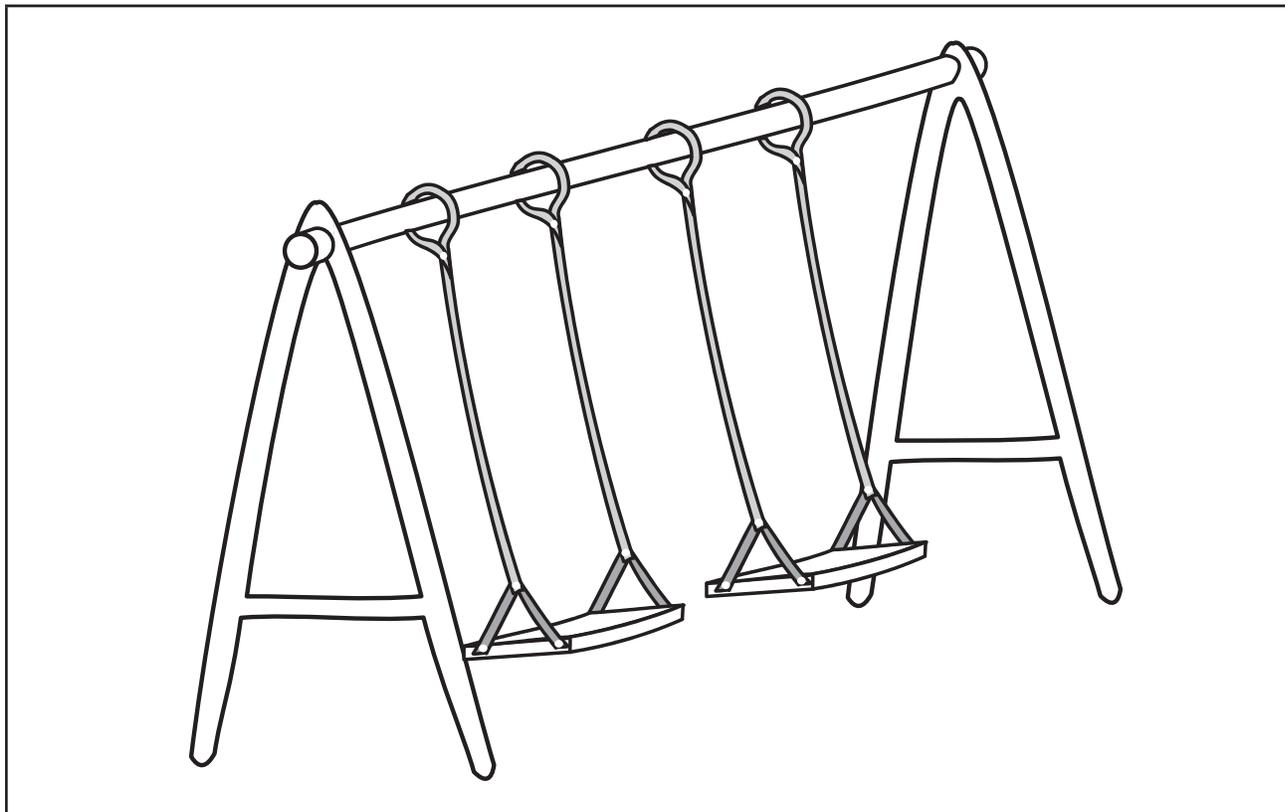
Picture Cards



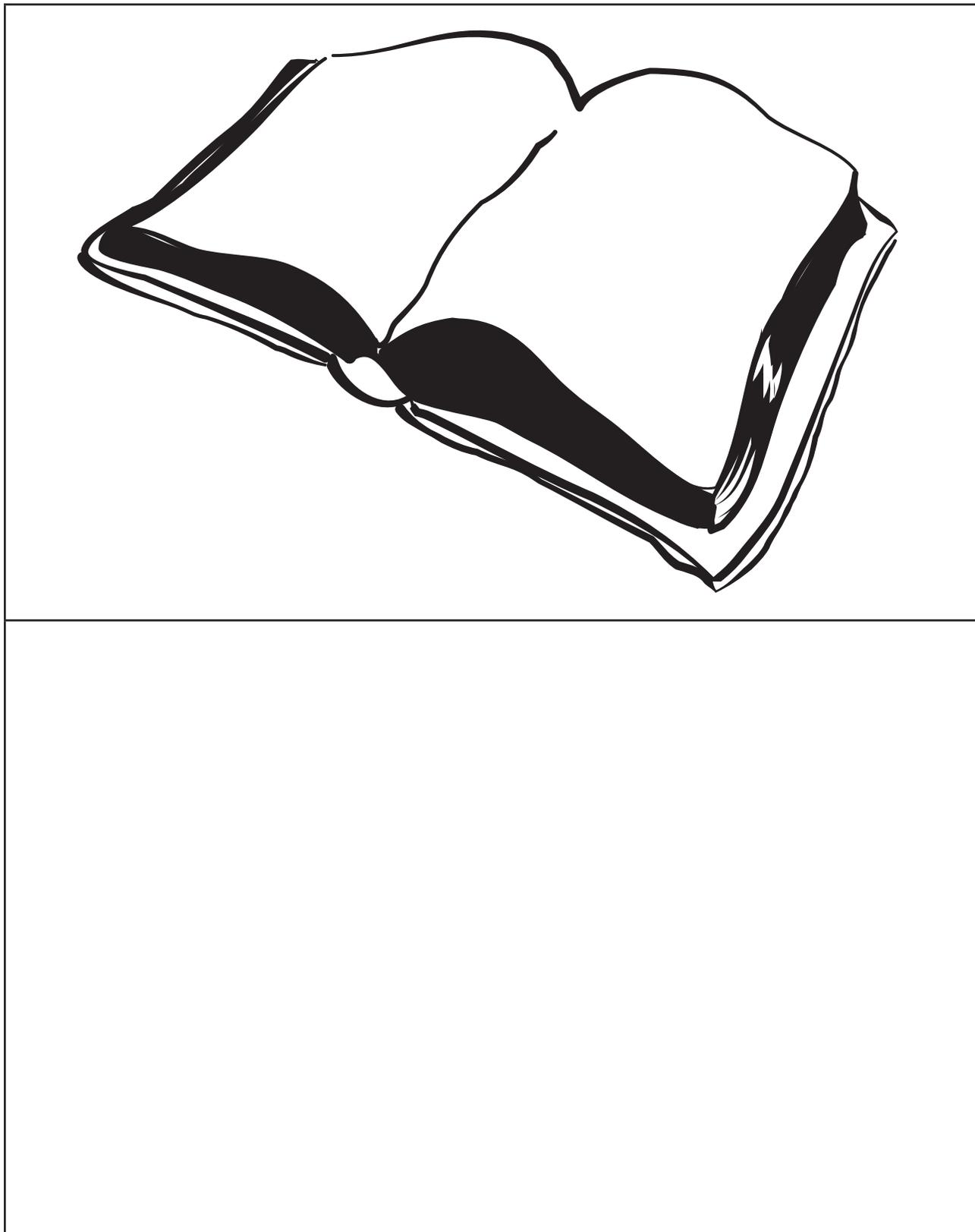
Picture Cards



Picture Cards



Picture Cards

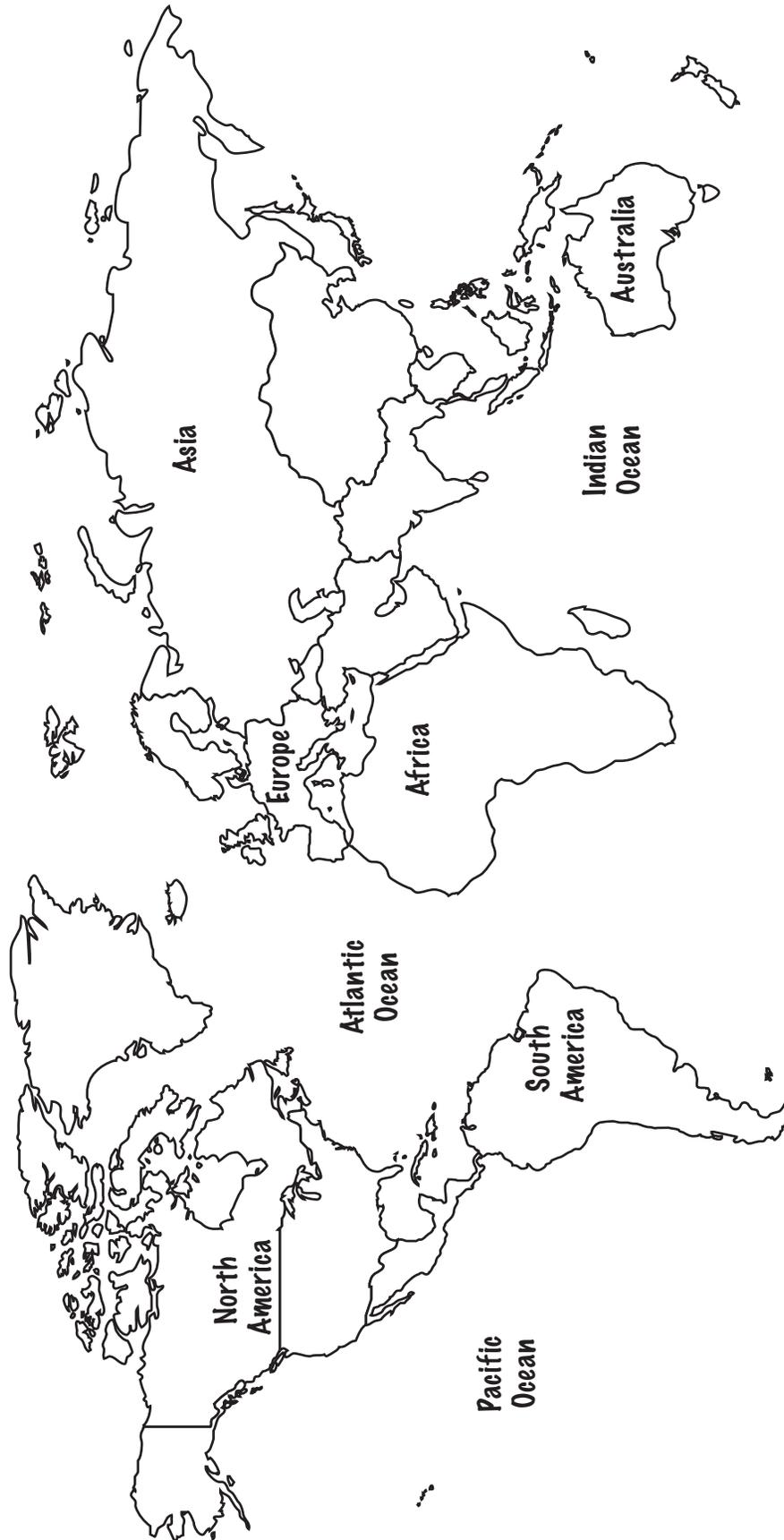


Name Bingo Card

Celebrating Winter Holidays

Name _____

World Map





December



S	M	T	W	T	F	S

Hanukkah lasts for eight days. This year it begins on December _____
and ends on December _____.

Hanukkah



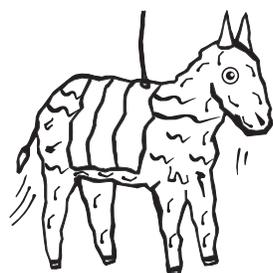
December



S	M	T	W	T	F	S

St. Lucia Day is celebrated on the same day each year. It is on December _____.

St. Lucia Day



December



S	M	T	W	T	F	S

La Posada is celebrated for nine days before Christmas. It starts on December _____ and ends on December _____.

Las Posadas



December

January

S	M	T	W	T	F	S

Kwanzaa lasts for seven days. It begins on December _____
and ends on January _____.

Kwanzaa



January

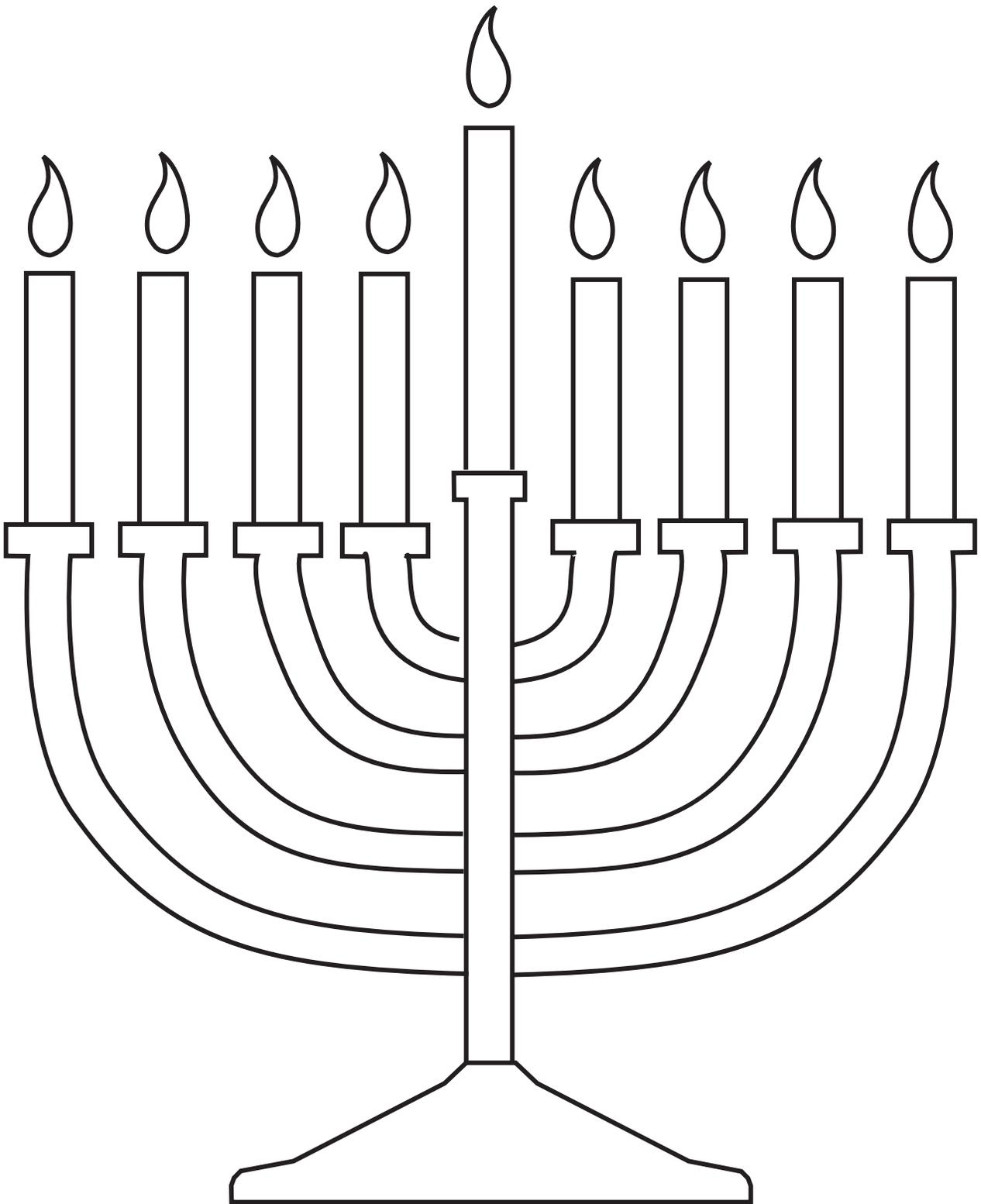
February

S	M	T	W	T	F	S

Chinese New Year varies from January _____ to February

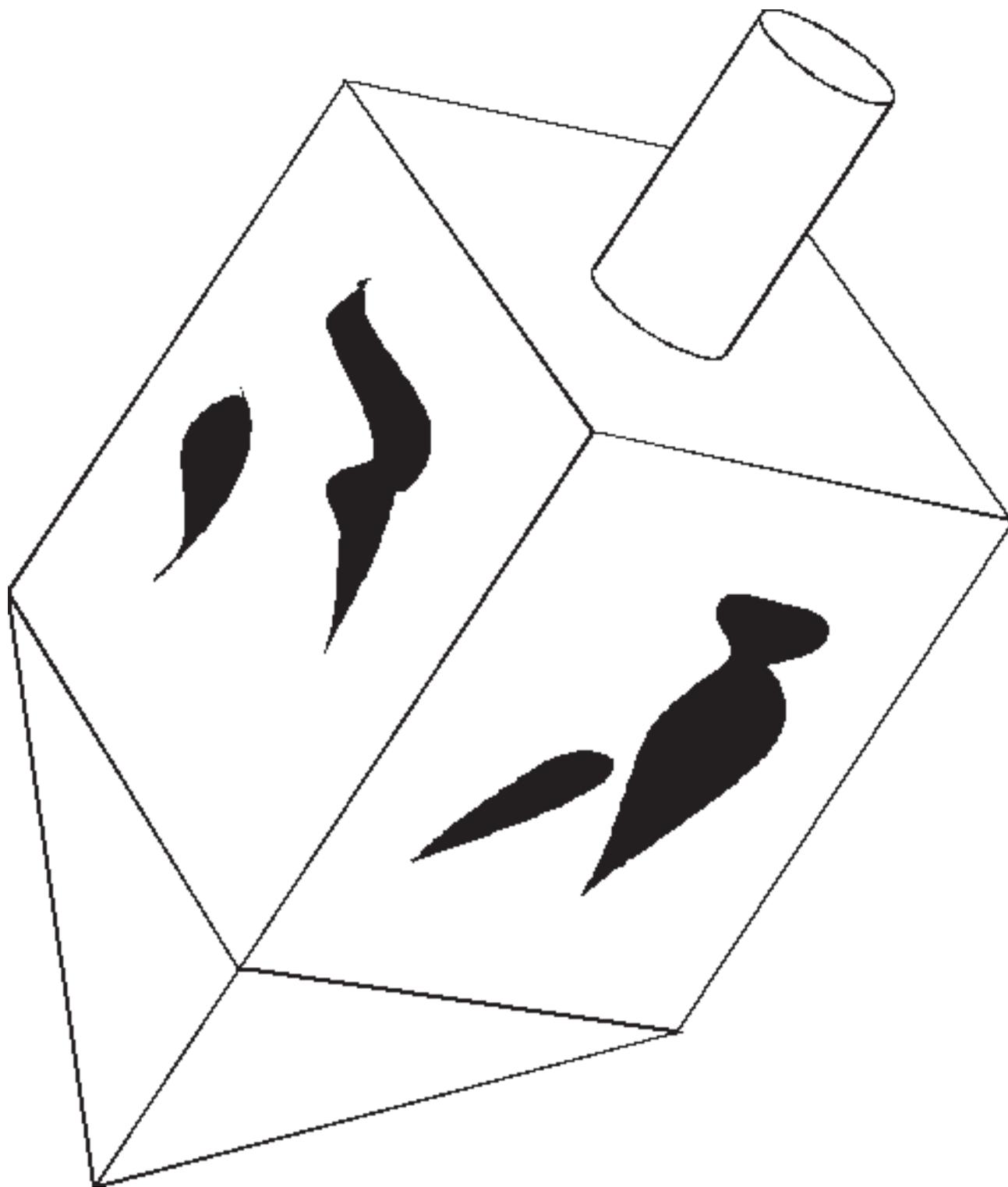
_____.

Chinese New Year



Menorah

Dreidel



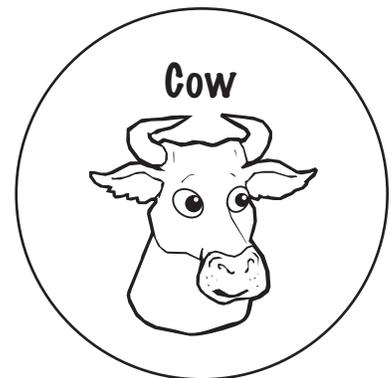
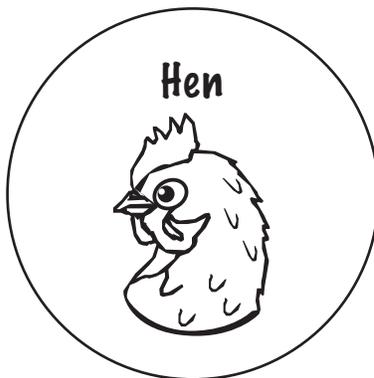
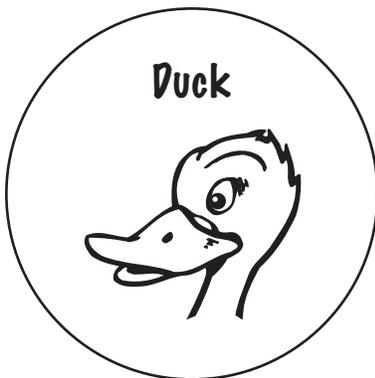
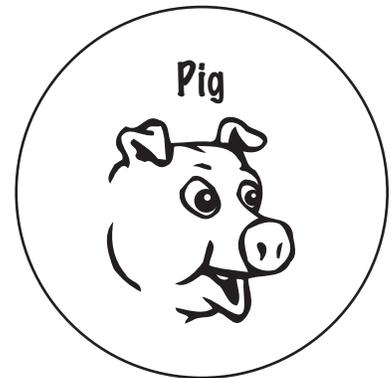
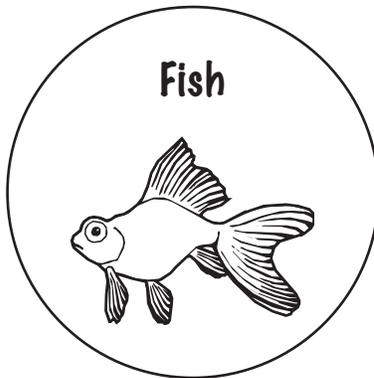
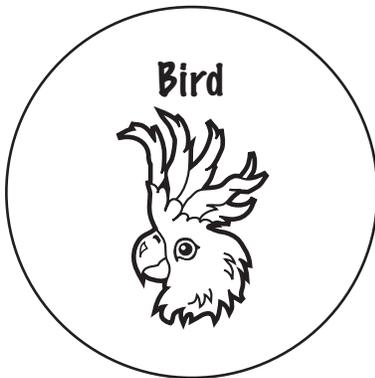
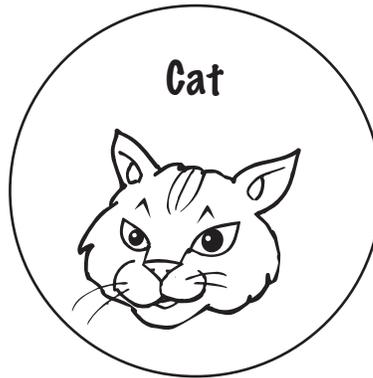
Kinara



Tree Outline



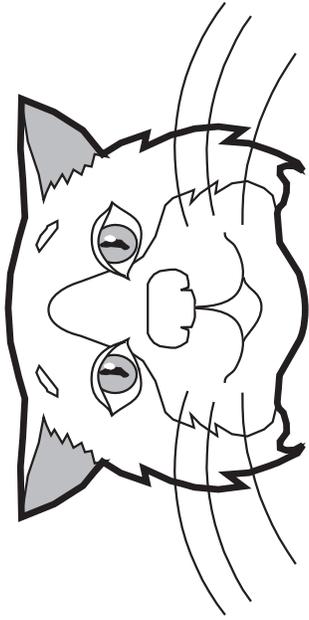
Animal Badges



My Cat Book

By:

This book is dedicated to



Cats have

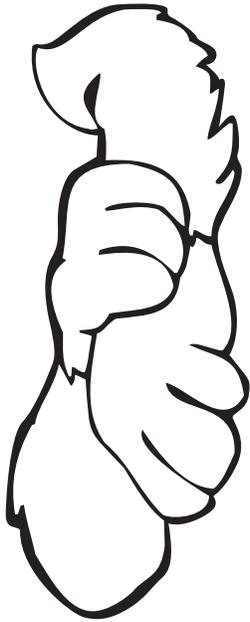
ears.

Cats like to



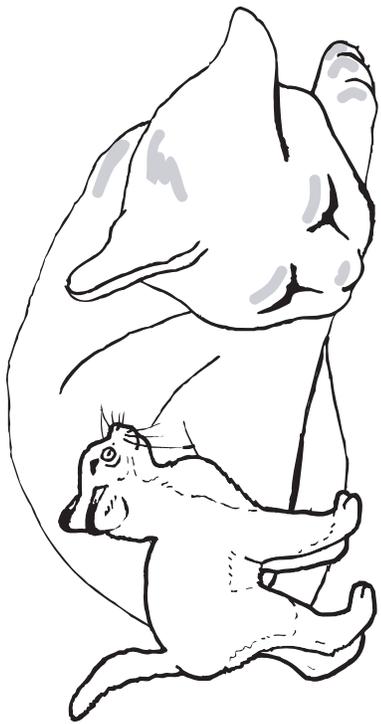
Cats have

on their body.



Cats have

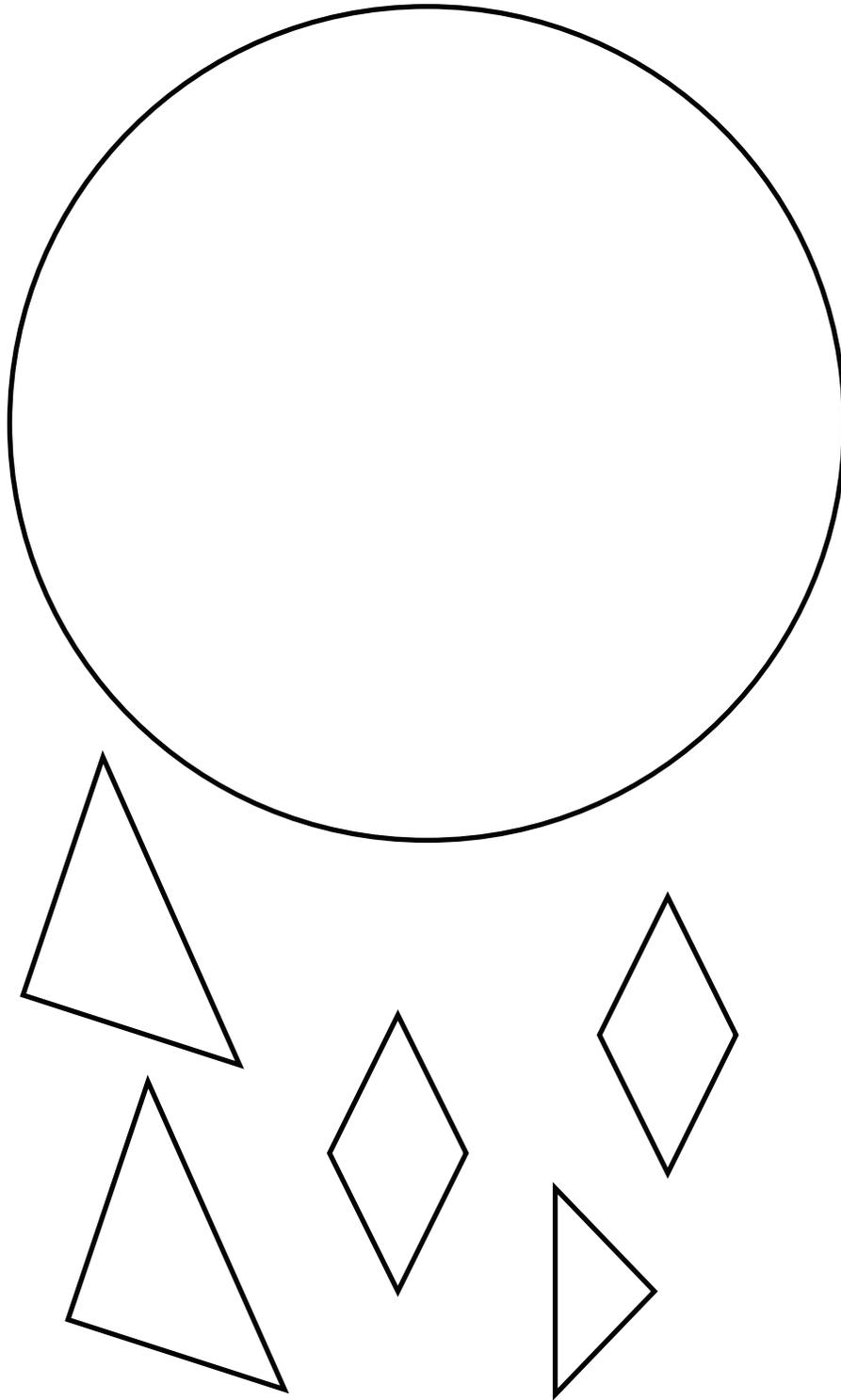
paws.



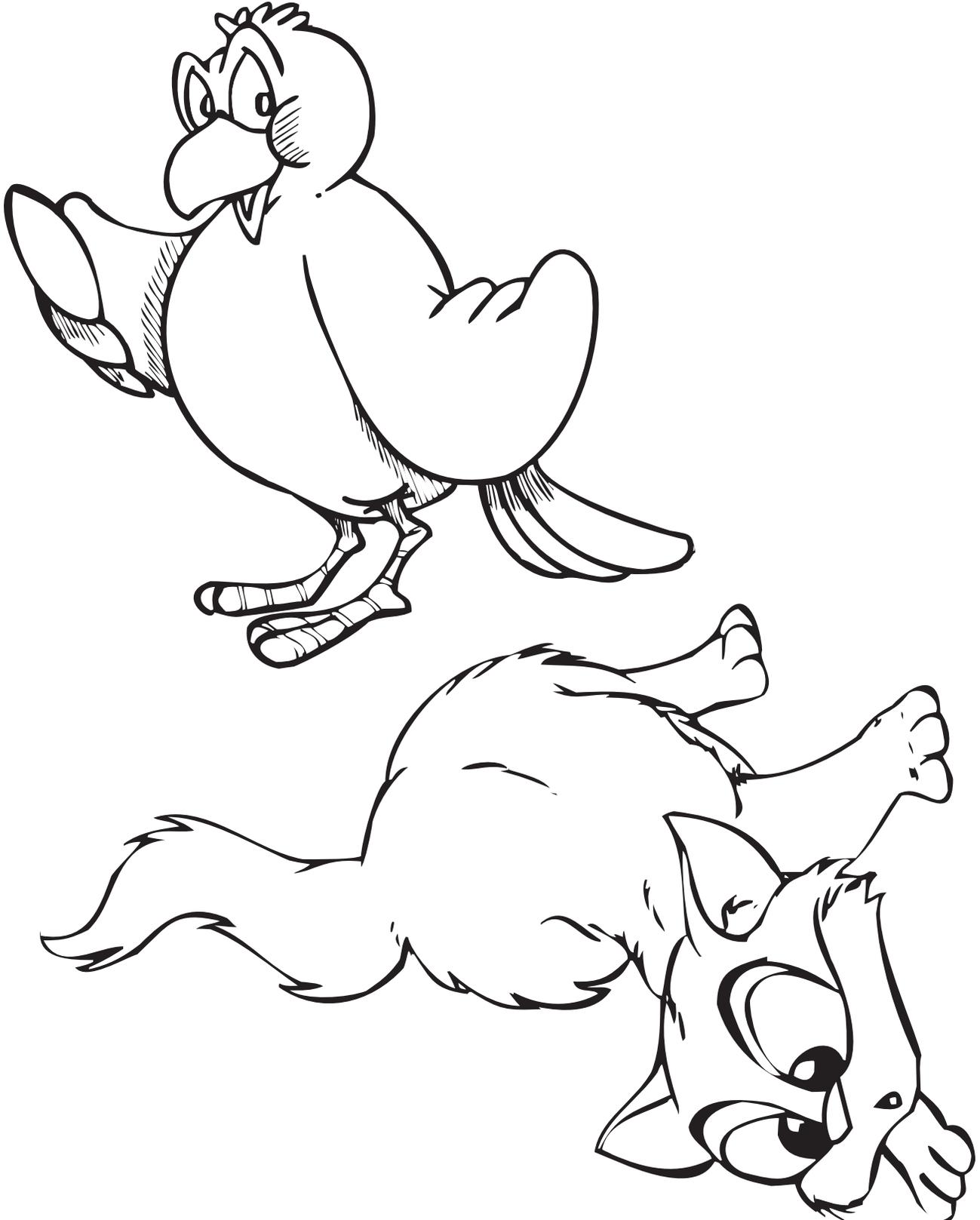
The End!

A baby cat is called a

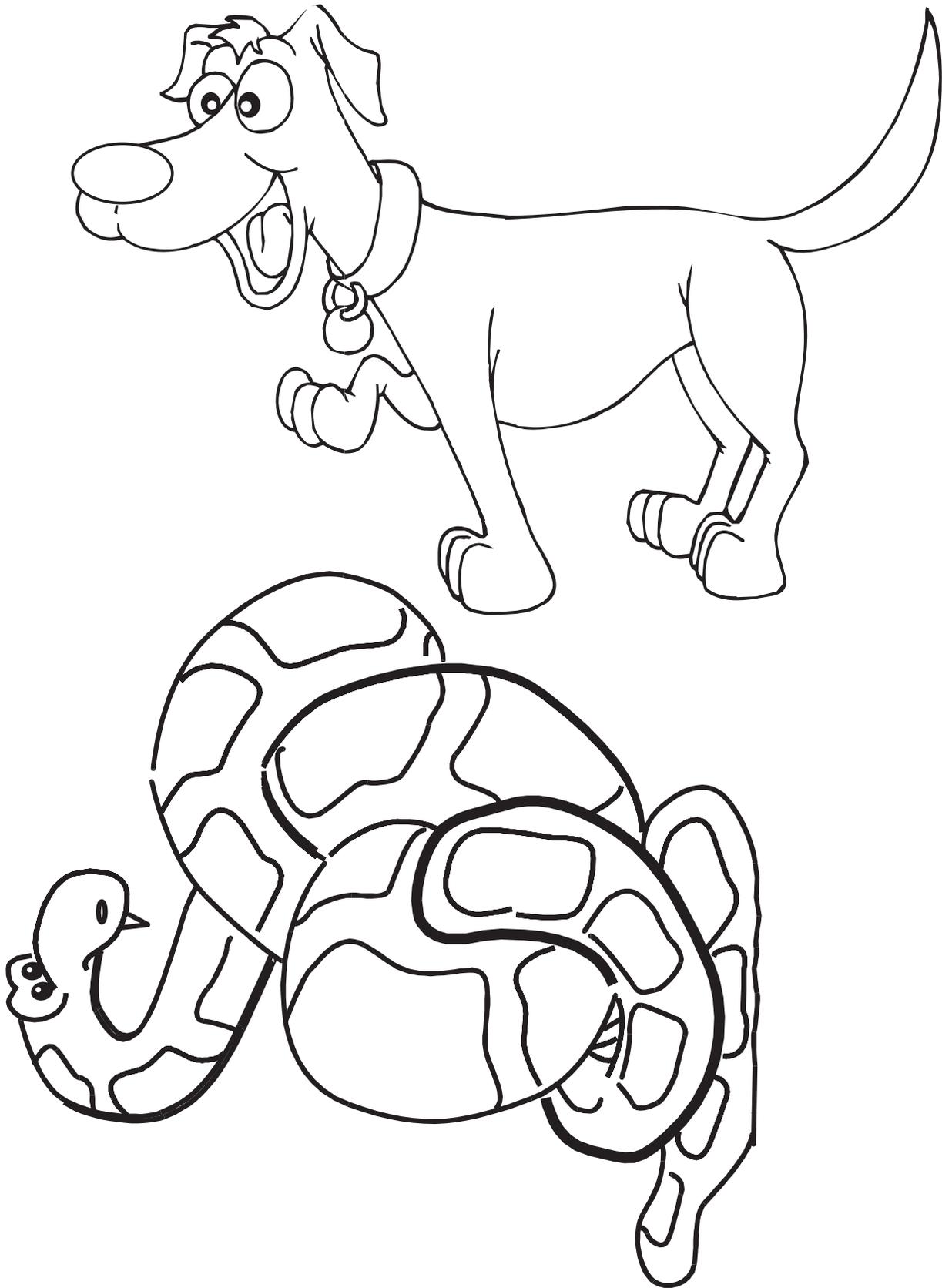
Cat Book Cover



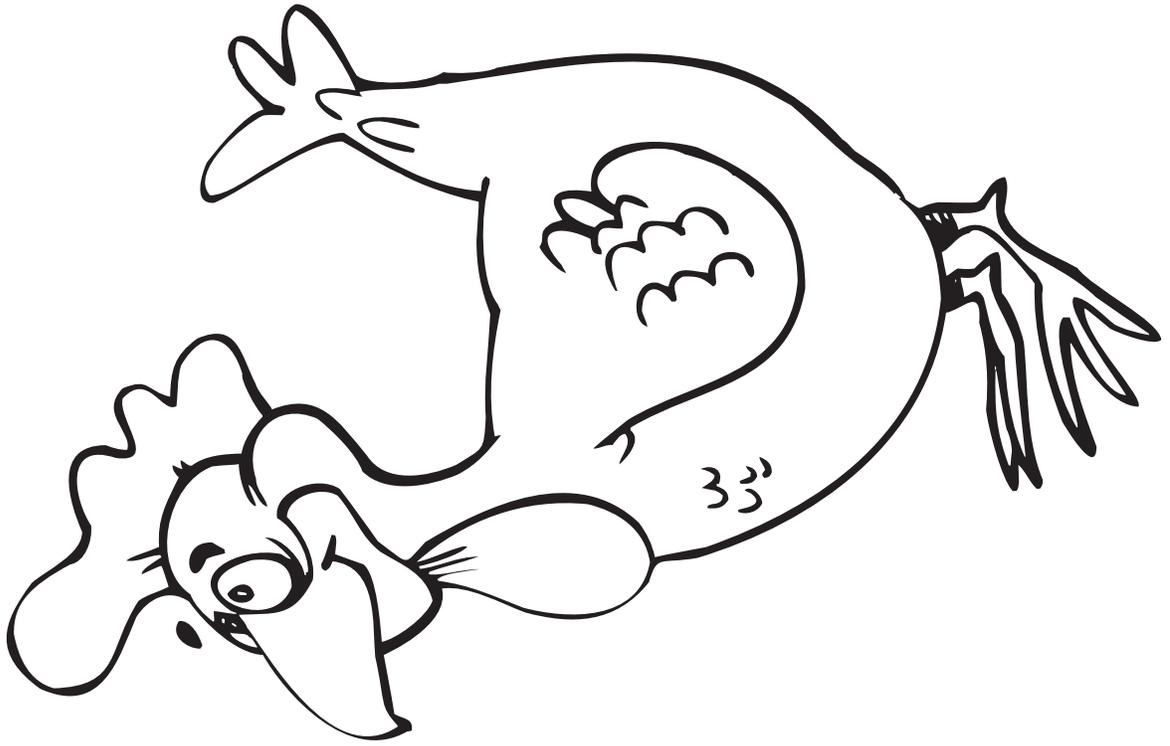
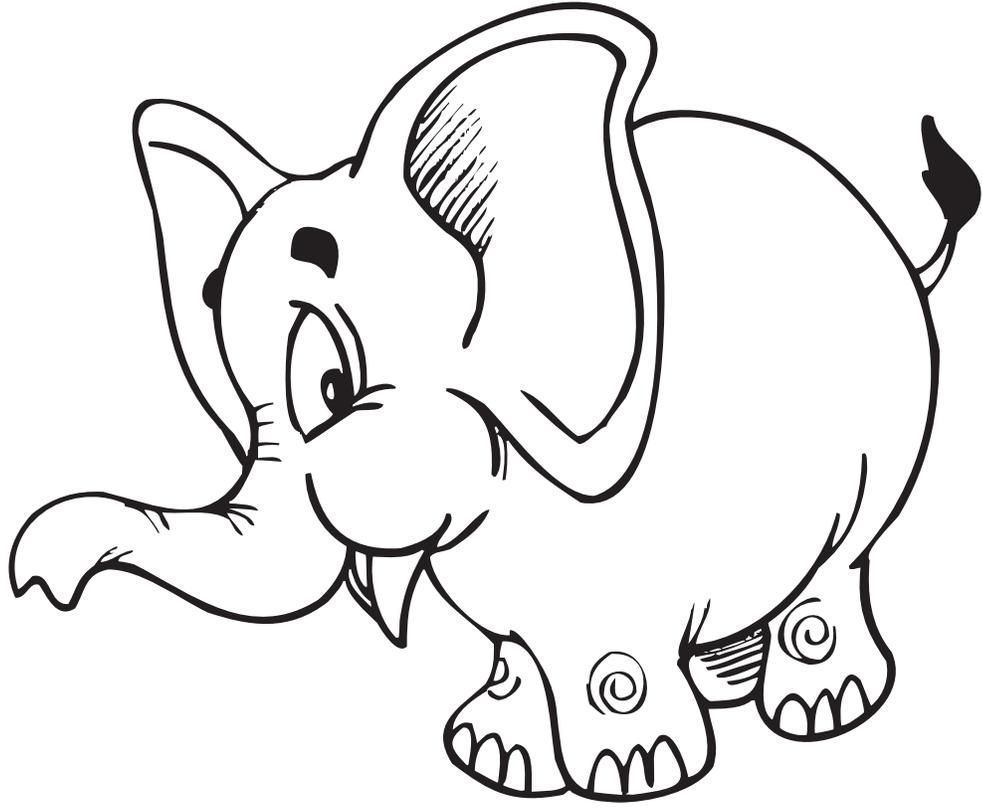
Animal Pictures



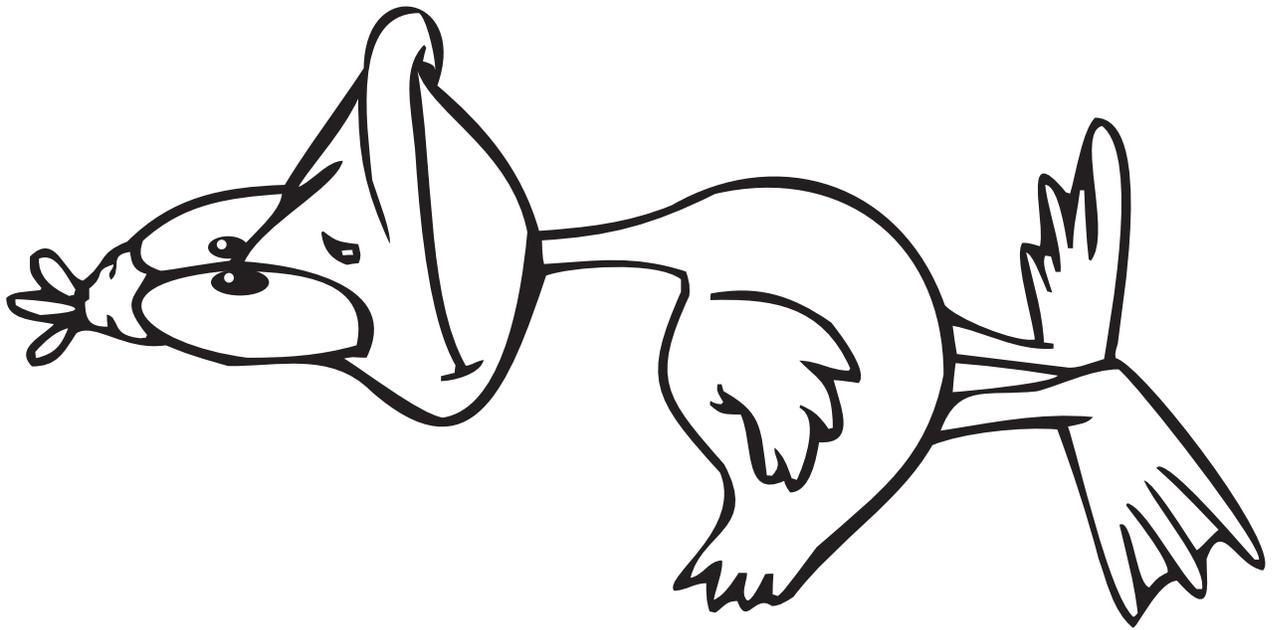
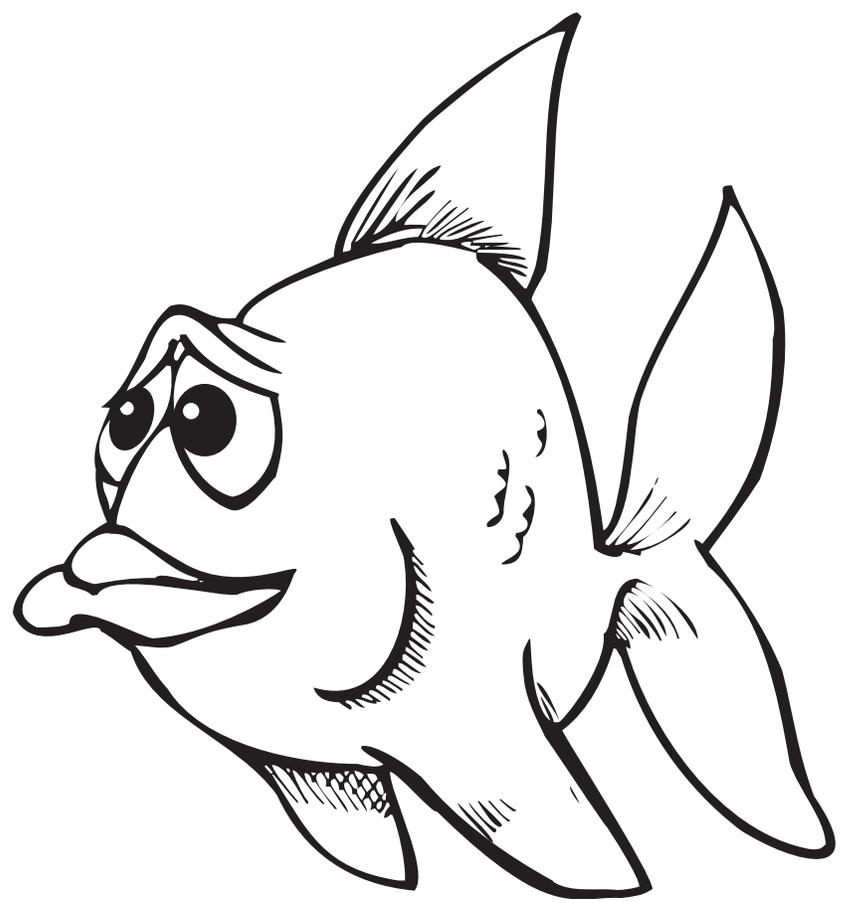
Animal Pictures



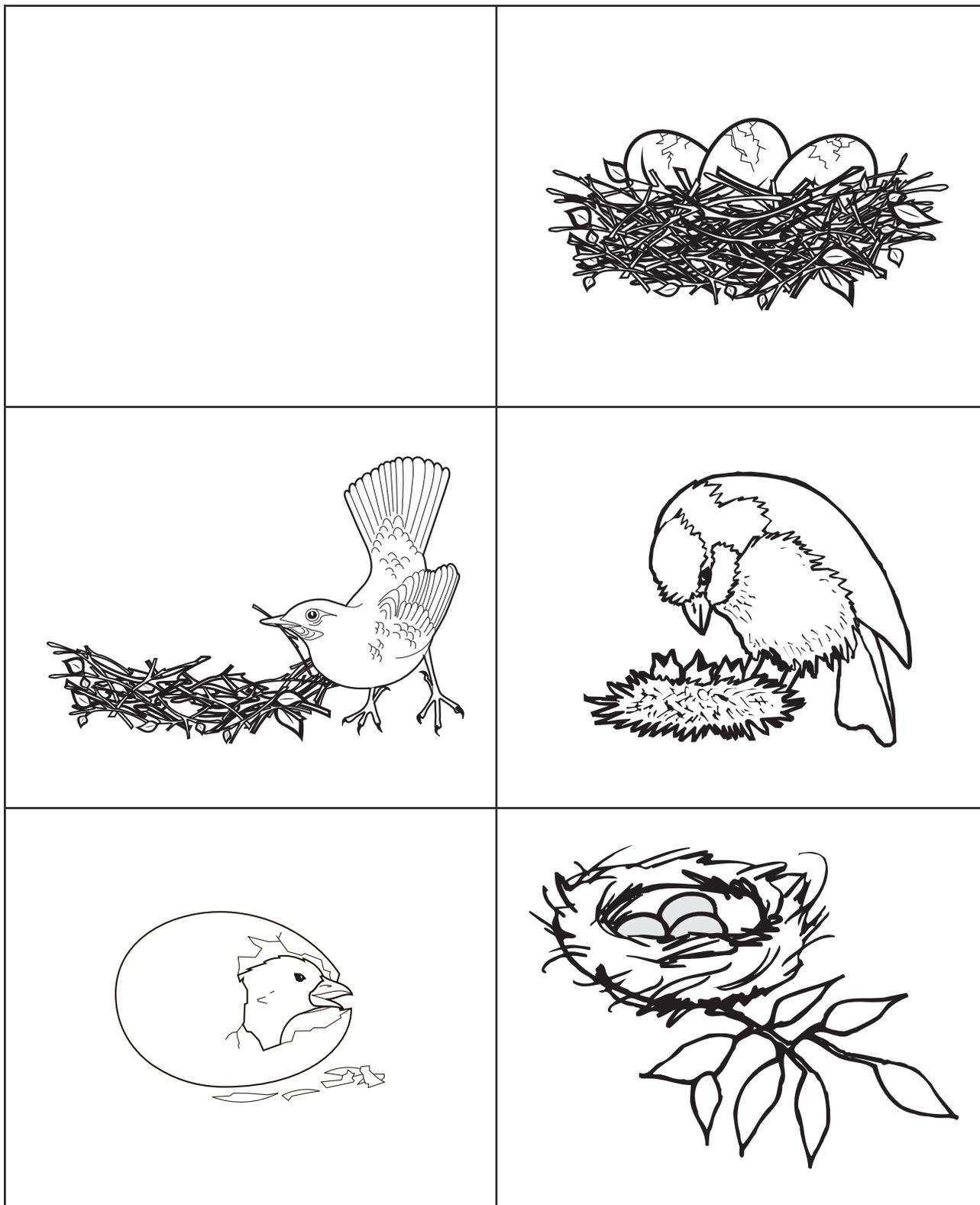
Animal Pictures



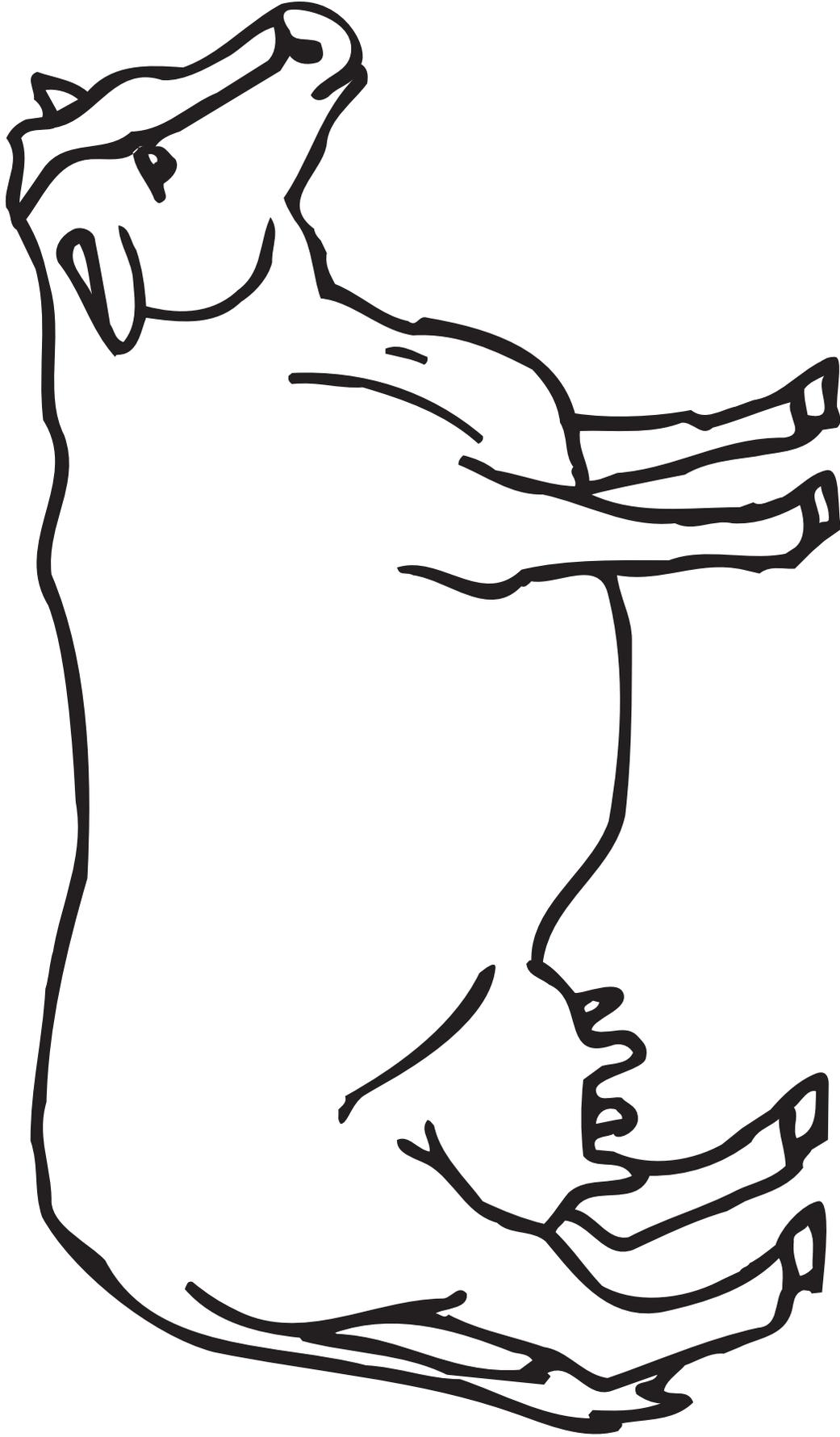
Animal Pictures



How an Egg Hatches



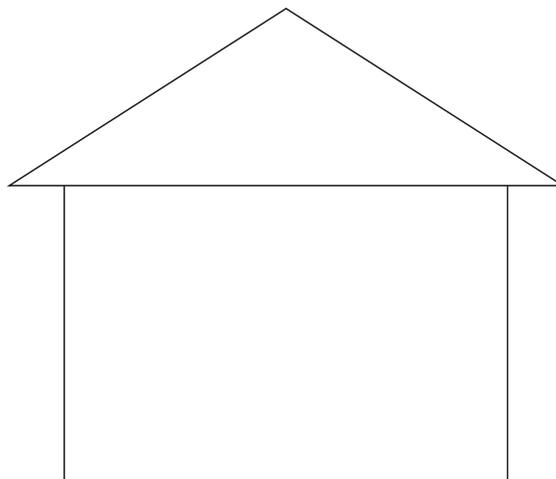
COW



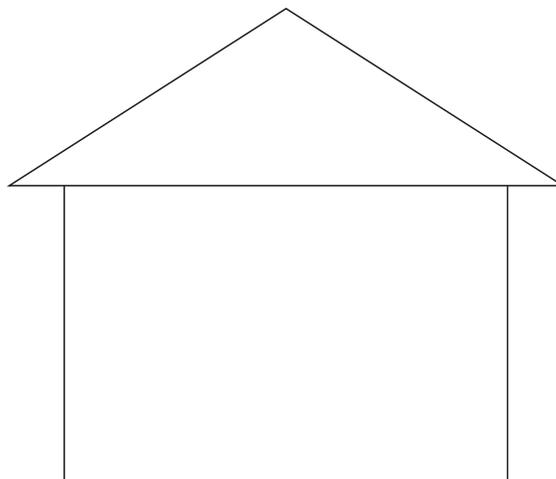
Name _____

Three Little Pigs Houses

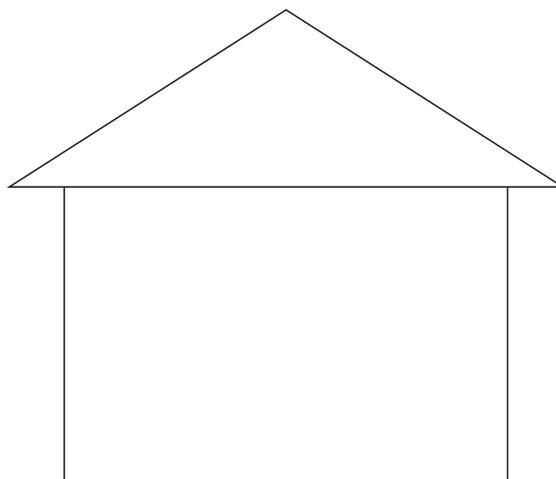
The first house was made out of



The second house was made out of



The third house was made out of



Mrs. Wishy Washy Characters

