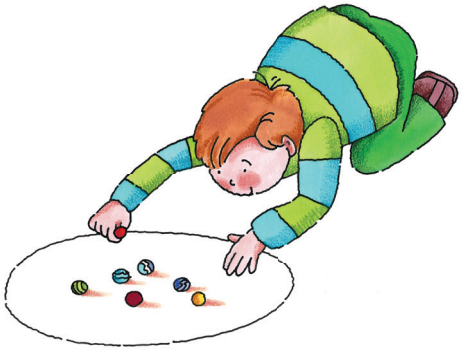
WINTER 2016

Child Care and Development Services

CHILDREN'S HOME SOCIETY OF CALIFORNIA

PRESCHOOL **MATH SKILLS**

What does math learning look like in a room of children who are three to five years old?



Perhaps something like this: Jimmy is making breakfast in the dramatic play area, Sarah is building a fort with blocks, Luis is looking at sea shells on the science table, Ana is reading the book *If You Give a Mouse a Cookie*, and Roman is in the art area tracing different sized lids. All of these children are playing. This means they do not feel the pressure of time constraints or pressure to demonstrate the right answer, and the activities are of their own choosing. Yet they are all learning about math.

Jimmy is measuring pretend ingredients, counting how many plates he needs to serve his friends, and using patterned place mats to set the table. Sarah is learning about shapes and how they fit together, she is estimating, measuring, and engineering with blocks. Luis uses sea shells to practice counting, comparing, contrasting, ordering, and sorting based on physical properties. Ana's book is showing her how events can be sequenced and the concept of cause and effect. Roman is exploring the properties of lines and circles while he traces, counts, and sorts lids.

Children who spend time in thoughtfully planned environments with attentive educators will develop and practice a wide variety of math skills and concepts. The learning environment can include a specific math area with puzzles, manipulatives (small blocks and building sets), scales, measuring tapes, objects to count, match, and classify (buttons, baseball cards, bottle caps, and lids), and math games (spinners, dice). *continued on page 4*

SEASONAL **BOOKS**

It is important to include books about the seasons in your story time. Children can make connections between what they see in books and what they see around them, which strengthens their developing literacy skills. Visit your local library and take a look at some of these books about the foods, animals, and celebrations of autumn.

- *10 Fat Turkeys* by Tony Johnston
- *Apples for Everyone* by Jill Esbaum
- *Apples, Apples, Everywhere: Learning about Apple Harvests* by Robin Koontz
- *How Many Seeds in a Pumpkin* by Margaret McNamara
- *Leaf Man* by Lois Ehlert
- *Leaves* by David Ezra Stein
- *Owl Babies* by Martin Waddell
- *Seed, Sprout, Pumpkin, Pie* by Jill Esbaum
- *Stellaluna* by Janell Cannon
- *Ten Red Apples* by Pat Hutchins
- *The Busy Little Squirrel* by Nancy Tafuri
- *The Little Old Lady Who Was Not Afraid of Anything* by Linda Williams
- *The Runaway Pumpkin* by Kevin Lewis
- *The Very Busy Spider* by Eric Carle
- *Too Many Pumpkins* by Linda White
- *'Twas the Night Before Thanksgiving* by Dav Pilkey

WHAT'S **INSIDE**

FOCUS ON MATH

Focusing on math is easier than you think. Math is essentially in everything children do. Whether it is setting the table for meals, building block castles, reading a book, playing hopscotch, drawing, or cleaning up; math is everywhere. Think about the activities you plan each day and the variety of materials that you make available to children. What opportunities for learning math concepts are available in your areas for dramatic play, building, art, reading, music, and outdoor play?

Reflecting on what your program offers helps you provide children with more meaningful learning experiences, and challenges you to be a creative and intentional educator.

The *California Preschool Curriculum Frameworks* offer questions for reflection on the practice of teaching at the end of each section. Take a moment to answer the following questions regarding math learning in your program.

- What real-life settings can you set up in your preschool environment to provide a context for counting and doing arithmetic?
- What could be added to the physical environment to promote children's learning of measurement concepts and skills?
- What materials in your preschool environment engage children in exploring and manipulating shapes?
- Think about a recent experience in which children in your group were engaged in mathematical thinking and reasoning. What strategies did you use to engage children in mathematical reasoning?

Source: *California Preschool Curriculum Framework, Volume I* by the California Department of Education (Sacramento, 2010).

CARING **FOR KIDS**

MATH LANGUAGE AND LITERACY

Math activities offer children the opportunity to enrich their language and connect new vocabulary to experiences and concepts. Educators can take advantage of teachable moments within these activities to introduce vocabulary and expand a child's understanding of a particular concept.

For example, a child exploring halved apples at the science table lifts up two halves of a red apple and says, "They look the same!" You could answer by saying, "You are right, the apple is symmetrical. When it is cut in half, the two halves look the same. What happens if we put the two halves back together?" From there, the discussion could turn to how two halves make an object whole, and how one half is a "fraction" of the whole.

Regardless of a child's age, there are three steps to building a rich math vocabulary.

Step 1: Be available for teachable moments. Sit with the children during activities to watch and listen while they explore. When a child asks a question or makes eye contact with you, those are your cues to step in and help.

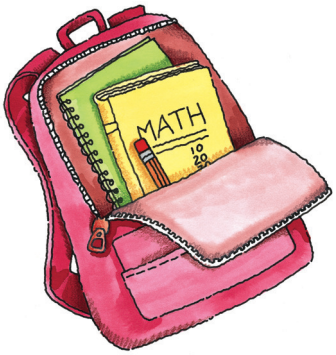
Step 2: Answer the child's question, acknowledge his observation, or describe what is happening. This is when you would introduce vocabulary. In the example above, the educator agreed with the child's observation and supplied the words "half," "halves," and "symmetrical" to describe his discovery.

Step 3: Ask a question that allows the child to build on his existing knowledge, such as the example above when the educator asks what will happen if they put the two apple halves together.

Increase preschool math literacy by displaying numbers, shapes, and math symbols in your writing area, choosing books that discuss math concepts for your book area (including non-fiction texts such as the sports section of a newspaper, cookbooks, song books, or books with maps), and encourage art activities that involve drawing or painting lines. While reading, children can hunt for numbers and shapes, or count objects on a page.

Here are some common math terms that may come up during play: add, angle, balance, coins, curve, double, dozen, estimate, equal, graph, inch, intersect, last, least, line, measure, middle, minute, money, more, names of shapes, none, number, pattern, plus, position, predict, quantity, ruler, scale, shape, side, sort, square, straight, subtract, temperature, time, total, uneven, value, volume, week, weight, year, and zero.

Building a child's math language and literacy allows him to express his ideas, ask more complex questions, and have a deeper understanding of the concepts he is exploring.



WHY **PLAY OUTSIDE?**

When you were growing up you probably heard your parents say, "Go play outside." Studies show that children are spending half as much time playing outdoors as they did twenty years ago.

In fact, the Kaiser Family Foundation reported that children ages eight to eighteen spend an average of seven hours and thirty eight minutes a day using entertainment media (computer games, television, smart phones, tablets, etc.). We also know that children today are suffering from higher levels of obesity, stress, diabetes, and other health concerns.

The American Academy of Pediatrics has stated that "sixty minutes of unstructured free play is essential to children's physical and mental health." Health benefits from spending time outside include: increasing physical activity, raising levels of Vitamin D, and improving distance vision.

When children play outside they run, skip, climb, balance, hop, skip, and jump. They also invent games, learn to cooperate, take turns, solve problems, build friendships, engage in pretend play, and enjoy being part of a community.

Releasing energy with outside play also benefits the mind. Laughing and playing outside reduces stress levels, helps children sleep better, and can even reduce the symptoms of Attention Deficit Hyperactivity Disorder (ADHD). Research has also shown that time outdoors improves academic performance in school aged children during standardized tests in math, reading, writing, listening, and critical thinking.

As a result of this research, there has been an increase in community nature groups, nature based play programs for preschoolers, and outdoor science programs for school-aged children.

You can find parks in your area by visiting your state or city's website for the Department of Parks and Recreation. Families and educators can find information about nature clubs, research, and campaigns by visiting www.childrenandnature.org. Remember that it is not only the children who benefit from time spent outdoors; it is good for your health too!

Source: www.nwf.org/What-We-Do/Kids-and-Nature

EASY PUMPKIN MUFFINS

During the fall season children are usually interested in pumpkins because they see them being sold in stores or being used as decorations. In a large sensory tub, you can cut open a pumpkin to let children explore what it looks like on the inside. You might even want to roast the pumpkin seeds as a snack.

Below is a pumpkin recipe you and the children can bake for a breakfast treat or morning snack. Children can help with measuring and mixing ingredients, greasing the muffin pan, pouring batter, and cleaning up. This is a fun way to practice practical math skills and enjoy a tasty treat.

You will need:

- 1 (18.25 oz.) box of yellow cake mix
- 1 (15 oz.) canned pumpkin
- 1 tsp. ground cinnamon
- 1/2 tsp. ground nutmeg
- 1/4 tsp. ground cloves
- Optional: Substitute 1/2 tsp. pumpkin spice for the nutmeg and cloves.

Instructions:

1. Preheat oven to 350 degrees. Grease a 12 cup muffin pan or line with paper liners.
2. In a large bowl mix together the cake mix, canned pumpkin, cinnamon, nutmeg and cloves until smooth.
3. Spoon equal amounts of batter into the prepared muffin cups.
4. Bake for 20 to 25 minutes or until a toothpick inserted in the center of one comes out clean.
5. Allow muffins to cool before serving.
6. Serve with a glass of milk and some fresh fruit.

Source: martysmusings.net/2013/09/easy-pumpkin-muffins.html

PRESCHOOL MATH SKILLS *continued from page 1*

Include math learning materials in other learning areas, such as:

Art and writing area: rulers, different sized objects to trace, number and shape stickers, or playdough with cookie cutter shapes.

Reading area: a variety of books and literacy materials that illustrate math concepts or contain math words and symbols (one, 1, #1).

Building area: trace each block shape and tape it to where you want each of those blocks stored.

Science area: scales, rulers, measuring tape, and natural items to count, match, classify, and sort. Posters in the science area may include graphs of objects being studied, or sequence photos of how a plant grows.

You may also include posters around the room that show shapes, numbers, symbols, or math words.

Dramatic play also allows children to connect math skills and concepts to every day experiences. For example, a restaurant theme could include: take-out menus with prices listed, cash register, calculator, pretend money, empty food containers with nutrition labels, cook books, placemats with a pattern showing how to set the table, measuring spoons and cups, a telephone, and receipt books for taking orders.

Educators also help children develop math skills by being observant and attentive. The *California Preschool Curriculum Framework, Volume I* states: "Close observation allows teachers to identify thought-provoking moments through every day play, where mathematical concepts can be clarified, extended, and reinforced, and children can be prompted to make new discoveries." Through close observation you can evaluate a child's development and learn what specific materials are needed in the environment to support each child's learning.

During daily routines you can lead children through simple math operations. Preschool children usually understand what "more" and "less" means, but you can take it a step further. For example, sit with children as you cut an orange and ask questions. "How many times can I divide the orange? If we all want the same amount of pieces how many can each person have? How can we figure it out?" You can offer ideas to help children get started. For example, "Could we pass it around one time and everyone takes one piece, and then we can see how many are left?"

Observation and positive interactions also offer insight into how a child is organizing his thoughts and expressing himself. Take advantage of those "teachable moments" when you can engage children in conversations that extend their learning to the next level. Creating a math rich environment and interacting with children during play will support their math development and provide them with the strong base they need for success in school.

Source: *California Preschool Curriculum Framework, Volume I* by the California Department of Education (Sacramento, 2010).

Creative Curriculum

CHILDREN'S HOME SOCIETY OF CALIFORNIA

Learning with the seasons provides unique experiences because those particular sights, sounds, colors, smells, textures, and tastes only happen once a year. Below are ideas for taking advantage of seasonal fall materials to extend children's learning.

FALL INTO LEARNING

AUTUMN SENSORY EXPERIENCE

Age group: Infants
What you need: A large blanket, pumpkins, yellow and green squash, gourds, and a variety of leaves.
What you do: Place nature items on the blanket. Sit next to the infant, or support the infant in your lap, and explore the nature materials. Allow infants to touch and smell the items as you describe their color, texture, weight, purpose, etc. Once infants have explored fallen leaves you may want to laminate them, or encase them in clear contact paper, so that infants can look closely at the veins of the leaves without crumbling them.
What they learn: Infants are sensory learners so exploring different textures, sights, and sounds is exciting for them. Talking to the infants while they explore nature materials introduces them to new vocabulary and helps them understand that language can be used to describe things and feelings.

SQUASH SHOP

Age group: Toddlers
What you need: A low table, large piece of white paper, crayons, toy cash register, re-usable (cloth) shopping bags, scales, small pumpkins, and different colored squash.
What you do: Use the paper to make a sign that says "Squash Shop" and allow children to decorate it. Place the sign on the wall behind the table. Arrange the squash and cash register on the table and invite toddlers to play and shop in the store. Position yourself near the Squash Shop to help extend learning by interacting with the children and initiating conversations about the colors, textures, sizes, shapes, and names of the squash.
What they learn: Toddlers explore different textures, colors, sizes, shapes, weight, and vocabulary. They also practice basic math skills as they count, compare, weigh, organize, or line up squash.

TWEEZING CORN

Age group: Preschool
What you need: Dried corn on the cob (decorative and usually with gourds at the grocery store), cooked corn on the cob, and tweezers (You can use kid-safe plastic tweezers or tweezers with rounded tips). You may wish to use trays to help keep corn on the table.
What you do: Place tweezers, one ear of dried corn, and one cooked on each tray. Invite children to remove the corn kernels with tweezers. Ask them which kernels they think will come off easiest. Record children's predictions and experiment outcomes on a chart. Ask questions that help children explore their predictions and discoveries. Children can also count, sort, and compare which ear of corn had more or less kernels. Be sure to save the left-over dried corn for planting or fall art projects.
What they learn: This science experiment allows children to strengthen fine motor muscles, and practice basic math and science skills such as counting, comparing, contrasting, predicting, drawing conclusions, and problem solving.

NATURE WEAVING LOOM

Age group: School Age
What you need: Different colors of yarn, rulers, scissors, fallen twigs or branches (if none are available you could also use wooden dowels), and natural items such as fallen leaves, flowers, or sticks.
What you do: Take children on a nature walk to hunt for fallen sticks, leaves and other nature items. Look for sticks that are thick and sturdy. Help children make a four-sided frame with their sticks. They can tie the corners together with yarn to hold them in place. Children can measure the distance from one side of the frame to the other and cut equal lengths of yarn. They should add an extra inch to the yarn so that it is easier to tie. They can then tie the yarn on one side of the frame, leaving a width of one finger space between each knot. Then they can stretch the yarn straight across and tie it to the other side. The finished product will look like a square loom (kind of like harp strings). Children can now weave leaves and nature items over and under across the strings. This is the same weaving technique used for making paper placemats.
What they learn: This art project gives children the opportunity to practice fine motor skills, measuring, patterning, and creative expression. This is also an opportunity for children to master tying knots. Many children have woven place mats, but weaving nature items is more challenging because the items are different shapes and lengths.

AGENCY **INFORMATION**

For more than a century, Children's Home Society of California (CHS) has adapted to the changing needs of children and families. Since 1891, CHS has worked diligently to protect our community's children and strengthen their families through diverse programs and services.

The mission of CHS is to reach out to children and families at risk with a range of services to ensure every child the opportunity to develop within a safe, healthy, and secure environment.

To fulfill our mission, CHS provides a variety of services to children and families in California and nationwide, working to improve their quality of life by offering vital information, educational, and resource services, which include Community Education, Child Care and Development, and Family Resource Services. Along with helping children and their families, CHS is an expert resource for child care providers, other social service agencies, and government agencies at the local, state, and national level.

Funded by California Department of Education – Early Education and Support Division

CHILD CARE **REFERRAL POLICY**

Children's Home Society of California's (CHS) Resource and Referral (R&R) Program provides child care referrals to parents within CHS's designated service area to all parents requesting services regardless of income level or other eligibility requirements. Referrals are provided to parents based on their specific needs. CHS refers to child care centers, license-exempt child care centers, and licensed family child care homes.

In order to promote quality child care for children, CHS will:

- Assist parents seeking child care, but will not make recommendations.
- Provide written information about selecting quality child care.
- Recommend that parents visit facilities before making a decision.
- Inform parents of their right to review licensing information about providers.
- Maintain confidentiality of all information received from the parent.
- Not discriminate against any individual or group based on race, creed, religion, national origin, sex, age, handicap, or income.

CHS reserves the right to discontinue referrals to a provider when:

- Licensing, law enforcement, or another regulatory agency has substantiated a complaint involving the health, safety, or personal rights of children; or actions that would impact the care or services to children.
- CHS is informed of an ongoing investigation regarding the health, safety, or personal rights of children; or actions that would impact the care or services to children.
- CHS has received a complaint regarding the health, safety, or welfare of a child and CHS is waiting for a response from the local licensing agency regarding the results of the complaint.
- The provider has been issued a probationary license or a corrective action plan.

CHS will notify the provider in writing when it is determined that CHS will discontinue referrals to the provider because of one of the above items.

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