

# Math+Science Connection

Beginning Edition

Building excitement and success for young children

September 2011

## TOOLS & TIDBITS



### Measure your hug

How big is your child's hug? Let her find out

by holding yarn from hand to outstretched hand. Cut the yarn, and then have her measure it. She might use markers ("My hug is 9 markers long"), or you could help her with a tape measure. *Idea:* Do this each year, and she can watch her hug grow!

### Night critters

Here's an activity that lets your youngster observe bugs that are active at night. Hang a white sheet from a tree or clothesline. Go outside together after dark, and shine a flashlight on the sheet. As bugs land, your child can observe them. How many different kinds does he see?

### Book picks

▣ In *Pigs Will Be Pigs: Fun with Math and Money* (Amy Axelrod), a family of hungry pigs eats all their groceries. Then, they search the house for money to go out to dinner. Youngsters can help them solve math problems along the way.

▣ From green buds in spring to white snow in winter, your child will love exploring the colors of the seasons in *Red Sings from Treetops: A Year in Colors*. A Caldecott Honor Book by Joyce Sidman.

### Worth quoting

"The art and science of asking questions is the source of all knowledge."  
Thomas Berger

## Just for fun

### Teacher:

Name six wild animals.

**Eddie:** Two lions and four tigers.



## Math all day

From the time your child gets up until he goes to sleep, math can be part of his daily life. Show him fun ways to use math all day long.

**Morning.** Help your youngster tell the time when he wakes up. Talk about what time he has to leave for school and how many minutes he has to get ready. That will help him develop a sense of *elapsed time*. He can also check the temperature in the newspaper or read your thermometer if you have one hanging outside. Or he might help you count money for his lunch or your cup of coffee.

**Afternoon.** Let your child be the scorekeeper or banker when you play board games. Make a game out of counting the times you each dribble a basketball before shooting a basket. ("Who can dribble the most times?" "The fewest?") Or have him divide the cookies evenly when he has friends over for snacks.

## Shape poetry

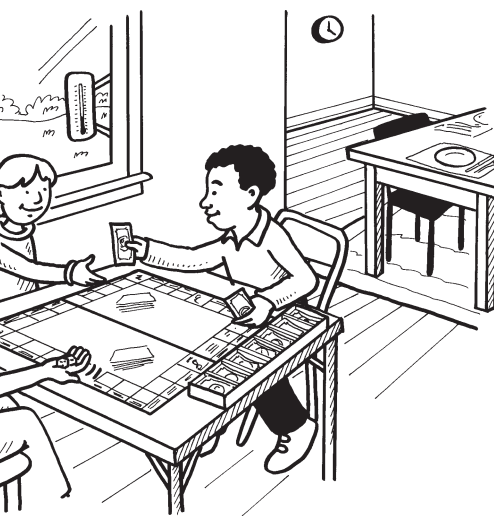
A round ball. A rectangular calculator. An oval mirror.


Encourage your youngster to find different-shaped objects and write about them in "shape poems." First, have her list a few objects. For each one, she can write the name ("picture frame"), the shape ("square"), and phrases describing it ("four sides," "four corners," "holds a picture").

Then, she can use the words to write a poem. On a piece of construction paper, have her draw the object's shape and carefully cut it out. Finally, she can copy her poem onto the shape.

*Example:*

Four sides, four corners,  
It's called a square.  
And guess what?  
My picture is there!



**Evening.** While you're making dinner, your youngster can set the table. He'll practice counting, create patterns (fork, plate, spoon, fork, plate, spoon), and learn that the number of settings has to match the number of people. At cleanup time, try posing fun math challenges. ("Can you put away 3 red toys, 4 blue toys, and 5 green toys?" "Can you stack  $9 + 4$  blocks on the bottom shelf?") When it's bedtime, ask him how many pages are in his book. Better yet, pick out a math story to read before lights-out! 



# Blending in

Why are animals all different colors? Your youngster can explore one reason with these fun activities that will teach her about *camouflage*.

**Spot animals.** Take a walk outside to notice creatures in their surroundings. You might point out a brown deer near a tree trunk or a green frog in the grass. Explain that some animals blend into the background to disguise themselves and stay safe. *Note:* You could also read books on the topic, like *What Color Is Camouflage?* (Carolyn Otto) or *Hiding in Forests* (Deborah Underwood).



**Play hide-and-seek.** Have your child close her eyes while you hide five stuffed animals around the house so they are camouflaged. A blue parrot might be tucked into a blue sofa cushion, or a white polar bear might go in the bathroom sink. After your child finds them all, she can hide stuffed animals for you to find.

**Make pictures.** Suggest that she draw or paint a forest, an ocean, a jungle, or a desert. She should add animals, making sure to include at least one that's camouflaged. For example, she might hide a brown bear in the woods. Can you find her camouflaged animal? Now make a hidden-animal picture for her.

## Q & A Problem solving

**Q:** I've heard that parents can help their children become better "math thinkers." How can we do that in our family?

**A:** People think of math as just being about numbers, but it's also about problem solving. Encourage your children to be good problem solvers, and they'll be lifetime math thinkers!



Start by letting your youngsters come up with solutions to everyday problems. For example, if they're putting away leftovers and ask which container to use, have them figure it out themselves. Through trial and error—"This container is too small" or "This container is just right"—they'll see that they can find their own solutions.

Also, ask your children lots of questions, and give them time to think about their answers. You can encourage them to talk through their ideas, too. This will help them build reasoning skills. Plus, they're apt to see that there can be more than one right answer.

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## SCIENCE LAB

### Ice race

How fast does an ice cube melt? It depends on where it is! Let your child learn about states of matter and temperature with this experiment.

*You'll need:* 3 ice cubes, 3 bowls, a timer (watch, cell phone, stove clock)

*Here's how:* Have your youngster place each ice cube in a separate bowl and put one bowl in the refrigerator, one on the kitchen counter, and one in the sun. Ask him which cube he thinks will melt the fastest. The slowest? Help him time how long it takes each cube to melt.

*What happens?* The cube in the sun will melt the fastest, and the one in the refrigerator will take the longest.

*Why?* Higher temperatures speed up the melting process.

*Idea:* Put the bowls of melted ice into the freezer, and have your child predict whether they will turn back into ice cubes. (When the water refreezes, he'll see that they take the shapes of the bowls they're in.)



## MATH CORNER

### Math bingo

Here's a fun way to build math skills as you turn any night into family bingo night.

First, have each player create a bingo card with three rows and three columns. In each box, players should randomly write one number between 0 and 20. Then, give each person markers (buttons, pennies), and try these games:

- On separate index cards, write number words (zero through twenty). Shuffle the cards, and stack them upside down. Hold



up one card at a time. If a player has the matching numeral on her bingo card, she puts a marker on that square and says the number. The first one to fill her card wins.

- Write addition and subtraction problems on index cards. (*Note:* Make sure the problems can be answered by the numbers 0–20.) Call out the problems,

and players mark the square if they have the answer. The first to get three in a row yells, "Bingo!" Check her card against the problems, and play again.

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## TOOLS & TIDBITS



### Sports math

Boost your child's math skills while you watch sports together. Ask him how many points the trailing team would need to tie or win. Then, have him calculate the touchdowns, baskets, goals, or runs needed. Older children could work out the possible combinations (touchdowns, extra points, field goals for football; three-pointers, regular baskets for basketball).

### Learning about levers

With a piece of wood, a nail, and a hammer, your youngster can learn about a *lever*—a type of *simple machine* that uses force to move or lift an object. Hammer a nail into the wood, and ask her to try to remove it with her fingers. Then, show her how to carefully use the claw end of the hammer to remove the nail. She'll see that a lever makes the job easier.

### Web picks

Take a virtual field trip to the Long Island Children's Museum. At [www.licm.com/for\\_kids.php](http://www.licm.com/for_kids.php), your child can discover patterns, explore symmetry, and enjoy other math and science activities.

Find science experiments and articles at [www.knowmag.ca](http://www.knowmag.ca), the online version of *Know: The Science Magazine for Curious Kids*. Topics include animals, the solar system, technology, and more.

### Worth quoting

"Mathematics is the door and key to the sciences." Roger Bacon

### Just for fun

**Q:** If you add 2 apples and 3 apples, what will you get?

**A:** A math problem!



## All about zero

Sometimes zero means nothing, and sometimes it means something. Why do we need the number zero? Use these fun activities to show your youngster why zero is important!

### Hunt for zero

Send your child on a search for zeroes. She might find them on a kitchen timer, a ruler, or a score in a newspaper. Then, let her make a "zero poster." She could draw a big zero on a poster board and decorate it with the examples she found. Talk about how zero can be used—as a starting point (ruler), an ending point (timer), or a way to say "nothing" (score).

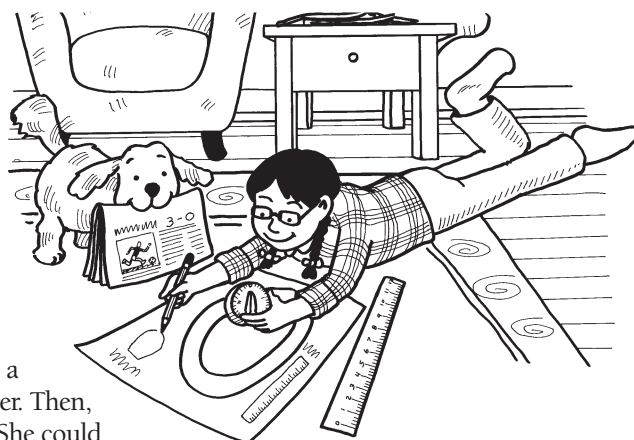
### Hold that place

With pencil and paper, have your youngster write the numbers 2, 20, and 200 and read them aloud. Then, let her erase the zeroes and read the numbers again. (20 and 200 are gone!) Explain that zero is a *placeholder*—just as she might ask a friend to hold her place in line while she gets her jacket, the number zero can

hold a place in numbers (example: 20 has 2 in the tens column and 0 in the ones column—since there are no "ones," zero is used to hold a place in that column).

### No more left!

Give your child three grapes, have her eat all three, and ask her how many are left (zero). Then, help her write the subtraction problem ( $3 - 3 = 0$ ). Practice with a few more scenarios, and have her solve the subtraction problems ( $5 - 5 = 0$ ,  $9 - 9 = 0$ ). She'll learn that sometimes the answer to a math problem is zero.

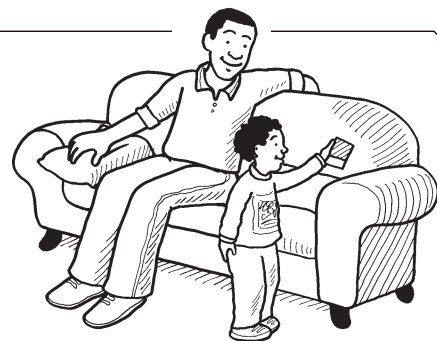


## What color?

Teach your youngster to be a keen observer by encouraging him to notice subtle differences in colors. Try this idea.

At a hardware or home improvement store, let your child pick out a variety of paint strips. Cut the strips into individual colors, and put them in a small bag.

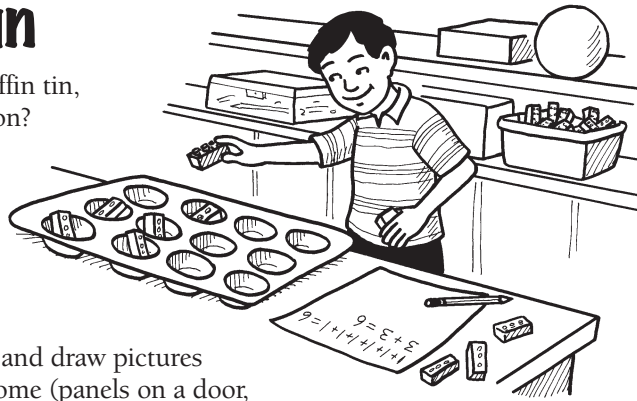
Then, have him pick one out and walk around your house or outside looking for objects that match the shade exactly. As he compares a dark green paint chip to your carpet, a sofa, or the grass, for example, he'll realize that there's a wide range of green—and that he has to look closely to find the differences!



# An array of fun

What do a carton of eggs, a muffin tin, and window panes have in common? They're all examples of *arrays*—arrangements of objects organized into rows and columns. Use arrays to help build your child's understanding of grouping:

- Have your youngster find arrays and draw pictures of them. Suggest that he look at home (panels on a door, drawers on his dresser) or in stores (cupcakes at the bakery, toilet paper rolls in a package).



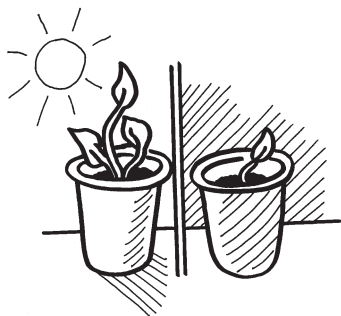
- Let him make his own arrays with a muffin tin and small objects (Legos, blueberries). For example, he could form an array with 2 rows of 3 Legos each. Ask him how many ways he can count the Legos (6 groups of 1, 2 groups of 3, 3 groups of 2). Then, help him write the addition problem for each grouping ( $1 + 1 + 1 + 1 + 1 + 1 = 6$ ;  $3 + 3 = 6$ ;  $2 + 2 + 2 = 6$ ). *For older children:* Turn the groupings into multiplication problems:  $6 \times 1 = 6$ ,  $2 \times 3 = 6$ ,  $3 \times 2 = 6$ .

## SCIENCE LAB

### Plant growth

What do plants need to grow? With this simple experiment, your youngster will find out.

*Materials:* 2 plastic or paper cups, potting soil, 6 bean seeds, water



Help your child fill each cup  $\frac{2}{3}$  full of potting soil and add 3 seeds to each one. Let her cover the seeds with more soil and moisten with water. She should put one cup in a sunny window and one in a darker place. Have her water the containers daily to keep the soil damp.

*What happens?* The plant in the sunny spot will grow faster and taller.

*Why?* Plants need sunlight as well as water and air to make the food that is necessary for them to grow.

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## MATH CORNER

### I know that number!

Here are two fun ways to spend time with your child and give him practice learning to recognize numbers.

**Make a Dalmatian.** Write the numbers 0–5 on separate index cards. Shuffle the cards, and place them facedown in a stack. Have each player draw an outline of a large dog on a sheet of paper. Take turns picking a card, saying the number out loud, and drawing that number of spots on your dog. When you've used all the cards, shuffle them and play again. Whose Dalmatian has the most spots after three rounds?

**Go fishing.** Give each player his own "fish bowl" (a clear bowl or plastic container). Then, put out a pile of "fish" (buttons or other small objects) and a stack of index cards numbered 0–10 (shuffled and facedown). To play, pick a card, and put that number of fish in your fish bowl. Return the card to the bottom of the stack. The first one to get 25 fish in his bowl wins. *Note:* Players can use paper and pencil to keep track of their fish.



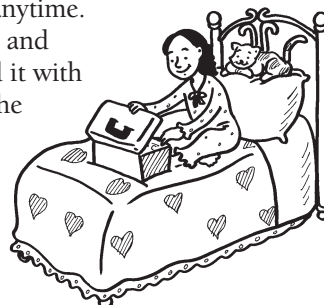
## PARENT TO PARENT

### Math box

At back-to-school night, Becca's teacher had a great idea for helping children practice math at home. She suggested that we put together a portable "math box" to play with anytime.

I got a plastic tote box, and together Becca and I filled it with "things with numbers." She put in a deck of cards, dominoes, dice, and flash cards. I added a pencil, a notepad, and a small bag filled with beads.

Then, we thought of math games she could try. Becca suggested rolling three dice and arranging them from lowest to highest. I said she could add the dots on both sides of the dominoes. We wrote each idea on a separate piece of paper and stapled them into a "math idea book." Now she's using her math box in the car, in bed before she goes to sleep, and even at breakfast—and she likes playing with math!



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## TOOLS & TIDBITS

### Estimate the bites

"How many bites will it take to eat your sandwich?" Asking questions like that will help your child practice estimating. Encourage her to use words such as *approximately*, *about*, and *almost*. (She might say, "It will take *approximately* 10 bites.") Then, have her check her estimate by counting bites.

### My science board

Make a portable science lab for your child by tying a magnifying glass to the handle of a cutting board. Then, have him find objects to study. He might compare different fruits or examine a small houseplant. Or go outside, and let him put bugs or rocks on his board to observe. (*Note:* Be sure he releases the bugs afterward.)

### Book picks

Enjoy catchy rhymes about a bear who finds a "hexagon treat" in a beehive, a child who counts dragons by 10s, and more. Each poem features a math concept in *aRHYTHMetic* (Tiffany Stone, Kari-Lynn Winters, and Lori Sherritt-Fleming). Also available in French.

Pictures and words tell the story of each animal's home in *Where Do I Sleep? A Pacific Northwest Lullaby* (Jennifer Blomgren). A nice bedtime read-aloud that teaches about animals.

### Worth quoting

"Nature does not hurry, yet everything is accomplished." *Lao Tzu*

### Just for fun

**Q:** How does a monster count to 100?

**A:** On his fingers and toes.



## Awesome algebra

Your youngster can begin building a foundation for algebra now. These fun activities will help pave the way.

### Secret code

Learning to spot patterns is an important first step to understanding how numbers relate to each other. Write a simple pattern with letters (*ababab*) and ask your child to use snacks or small toys to create it (nut, raisin, nut, raisin, nut, raisin). Then, let him give you a pattern to follow. *Idea:* Make a pattern with objects first, and have him write the code.

### Circle power

Help your youngster see that there are different ways to make the number 5 (or any other number). Draw 3 rows of 5 circles each. Use two crayons to color different combinations in each row (3 blue and 2 red circles, 4 blue and 1 red circle, 5 blue and 0 red circles). Can your child write the number sentence for each row? ( $3 + 2 = 5$ ,  $4 + 1 = 5$ ,  $5 + 0 = 5$ )

### Weather game

When is picking out clothes like a science lesson? When your child considers the weather as she decides what to wear! This game will get her thinking.

Together, cut 10 weather-related pictures and 10 clothing photos from old magazines. For example, you might cut out pictures of a rainy day, a sunny beach scene, a snowstorm, a raincoat, a bathing suit, and snow boots.

Turn the pictures over, and spread them out on a table or the floor. Take turns flipping over two pictures at a time. If you turn over a weather and clothing picture that go together, keep them. If not, turn them back over. Keep playing until all the matches have been collected.



Next, have him color a set of circles for you, using a different number.

### Equal or not

In algebra, your youngster will solve equations that are equal (*equalities*) and not equal (*inequalities*). He can start with this game. Shuffle a deck of cards (face cards removed), and take turns picking two. Lay them down side by side, and say the number sentence they create. *Examples:* 4 is more than 2, 5 is less than 7, 3 equals 3. Score 1 point for an inequality (more than, less than) and 5 points for an equality (equals). High score wins.



# Graphing on the go

Collecting and graphing information is good practice for math and science lessons—and it can be fun to graph real-life items outdoors. Try these ideas.

**Nature.** Together, pick up items that have fallen from trees, such as leaves, acorns, buckeyes, pinecones, and twigs. Have your child make a giant graph by lining up each type in a separate column on a sidewalk or playground blacktop (*note: make sure the items in her rows line up evenly, too*). She can use sidewalk chalk to label the bottom of her graph by object (“Leaves,” “Acorns”) and the left side by number (1, 2, 3).



Then, she can “read” her graph (“There are more leaves than acorns”).

**Outings.** Encourage your youngster to think of things to graph while you’re out together. Before a trip to the zoo, for instance, she might decide to graph animals by color or by whether they live on land or in water. On a sheet of paper, help her make and label a grid to use. Then, as you walk around the zoo, she can sketch pictures of the animals in the matching column. Or at the playground, she could graph the equipment (number of swings, sliding boards, seesaw) or the people (number of boys, girls, adults).

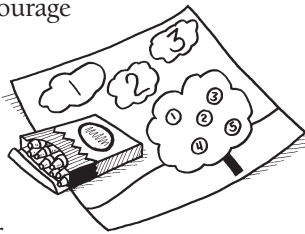
## MATH CORNER

### Math pictures



Combining math and art is a fun way for your youngster to build number skills. Here are some suggestions.

● **Draw and count.** When he draws a picture, encourage him to count the objects and write the numbers. For instance, he could number the apples in a tree (1, 2, 3, 4, 5) or the clouds in the sky (1, 2, 3).



● **Hide the numbers.** Suggest that your child choose a crayon and randomly write numbers on a sheet of paper. Then, with other colors, he should turn the numbers into objects (*example: a 7 might become the sail on a boat*).

● **Make number posters.** Have him use fancy pens or markers to write a number on a piece of construction paper. He can illustrate the number with sets of objects that match. For instance, if he writes a 3, he might draw 3 people, 3 balls, and 3 houses. *Idea:* Ask him to make a poster for each number 1–10.

## Q & A

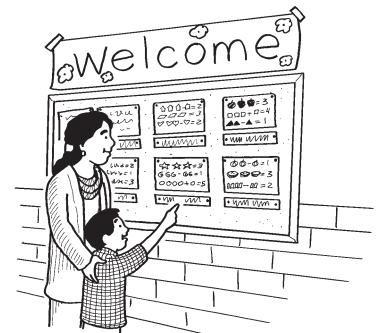
### Parent involvement

**Q:** I’ve read that it’s important to be involved in my child’s education. What should I do to get involved in what he’s doing in math?

**A:** The best—and easiest—way to be involved is to show interest in what he’s learning. Ask him to show you his math papers and explain his work. Let him be the “teacher”—he’ll enjoy sharing his knowledge, and going over the steps will boost his own learning.

Then, support math activities at school. Attend functions like Family Math Night. You could also offer to volunteer. If you’re available during school hours, his teacher may want you to listen as children recite math facts. Or if you can help in the evenings or on weekends, you could prepare materials for math centers.

Finally, bring math into everyday life with your youngster. You might point out how many stamps you need for your letters or how many slices of bread you need to make lunch. Let him know that you use math all the time—and that you love numbers!



## SCIENCE LAB

### Sound of music

Why do different strings on a guitar produce different sounds? With this experiment, your child will make her own “guitar” and find out!

*You’ll need:* empty cereal or cracker box, rubber bands of different widths

*Here’s how:* Help your youngster stretch the rubber bands around the box—they will be the “strings” of her instrument. Then, have her pluck the rubber bands, one at a time, and compare the

sounds. Which one sounds the highest? The lowest?

*What happens?* She’ll find that the thicker the rubber band, the lower the note sounds. The thinner the band, the higher the note.

*Why?* Sound is made by vibrations. On a smaller surface like the thinner rubber band, vibrations are faster and make a higher pitch. Vibrations are slower on a larger surface (the thicker band) and produce a lower pitch.



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## TOOLS & TIDBITS



### Form a letter

Help your youngster learn math words as he practices writing the alphabet. Give him oral directions for a letter. *Example:* "Make a *diagonal* line going *down*. Without lifting your pencil, make a *diagonal* line going *up* in the opposite direction." (He has formed a V.) Then, have him give you directions for making a letter.

### Animal tracks

Take a walk outside after a storm or snowfall, and encourage your child to look for animal footprints in the mud or snow. Can she identify any? Have her take along paper and sketch what she sees. Later, read a book (try *Big Tracks*, *Little Tracks: Following Animal Prints* by Millicent E. Selsam) or look online together to check her findings.

### Web picks

Find plenty of math activities at [www.mathgamesfun.net](http://www.mathgamesfun.net). Games can be set for different levels and cover addition, measurement, shapes, and more.

Have a carrot? Do an experiment! This site includes fun and easy ways for your youngster to learn about science through carrots. [www.carrotmuseum.co.uk/experiment.html#root](http://www.carrotmuseum.co.uk/experiment.html#root)

### Worth quoting

"I have not failed. I've just found 10,000 ways that won't work."  
Thomas Edison

## Just for fun

**Q:** What did one eye say to the other?

**A:** Between you and me, something smells.



## Let's count!

"I can count to 20!"

When your child learns to count, she puts numbers in order. But she also begins to understand that numbers represent objects. Here are three fun ways your youngster can build important counting skills.

**Zip and count.** On a strip of masking tape, help her write the numbers 1–10. Place the tape alongside a closed zipper (on a jacket or raincoat), lining up the 1 with the zipper pull. Call out a number (4), and have your child open the zipper to that number on the tape, counting as she goes (1, 2, 3, 4). Then, she can close the zipper and count backward (4, 3, 2, 1). With each zip, she'll practice counting.

**Stick and count.** Together, label index cards 1–20, one numeral per card, and place a matching number of stickers on the back of each one. Put the cards and small "counters" (beads, buttons) into a shoebox. Have your youngster pull out a card (numeral side up) and count out



that number of beads. Then, she turns the card over and puts a bead on each sticker. If the stickers and beads match up, she counted the right number! *Note:* This activity will teach your child about *one-to-one correspondence*—or matching each number to an object as she counts.

**Skip and count.** Counting by 2s, 3s, 4s, or 5s—called *skip counting*—gives your youngster a way to count faster, learn to group objects, and get ready for multiplication. Encourage her to practice skip counting around your house. She might count family members' eyes or ears by 2s. Or she could use chair legs to count by 4s.

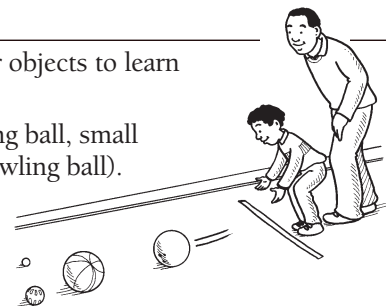
## Rolling along

Your young scientist can use balls and other objects to learn about force and motion. Here's how:

● Let your child gather different balls (Ping-Pong ball, small rubber ball, Wiffle ball, basketball, golf ball, bowling ball).

Have him roll each one from a start line to a finish line a few feet away. Ask him which ones require more *force* (he has to push harder). He'll discover that the heavier the ball, the harder he has to push. *Tip:* This will work better on an uncarpeted floor.

● Have him predict whether various objects (apple, ball, blocks, cucumber, magazine) will roll. Then, let him prop a book against a wall to make a ramp and test them. What does he find? (Items with curved edges will roll; smooth objects will roll better than bumpy ones.)

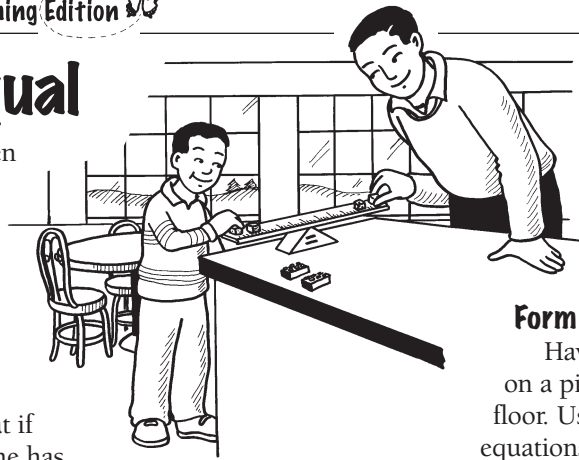


# The meaning of equal

What does “equal” mean? Young children often think it means “and the answer is.” Let your child experience what “equal” really means with these ideas.

## Make a scale

Help him make a scale by balancing a ruler on a triangular block. Together, experiment with balancing identical objects, such as dice or Legos. He’ll see that if you put two dice on one side of the scale, he has to put two dice on the other side. *Note:* Put the dice the



same distance from the center so they’ll balance. Suggest that your youngster think of an equal sign as a scale. Whatever is on one side of the equal sign has to balance with the other side.

## Form equations

Have your child write an equal sign on a piece of paper and lay it on the floor. Using blocks, he can make equal equations. If he puts 4 blocks on one side of the equal sign, he would put 4 blocks on the other side.

Next, have him write a plus and minus sign on separate slips of paper and use them to create more equations. He might arrange the blocks to make  $4 = 3 + 1$ , or  $2 + 2 = 3 + 1$ . He’ll see that  $3 + 1$  is the same thing as  $2 + 2$ .

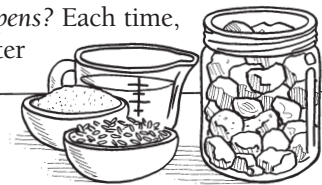
## SCIENCE LAB Filling space

In this experiment, your youngster will see with her own eyes how different forms of matter take up space—and how space is left between different forms of matter.

*You’ll need:* clear jar, small rocks, uncooked rice, sand, water

*Here’s how:* Have your child fill the jar with rocks until no more will fit. Ask her if she thinks the jar could hold anything else. Then, have her add as much rice as possible. Again, ask, “Will anything else fit?” Next, let her add sand. Ask the same question, and finally, have her pour in water to the top of the jar.

*What happens?* Each time, your youngster is likely to say that nothing else will fit in the jar. But each time, she’ll be able to add the new material.



## PARENT TO PARENT Math house

Last week my daughter woke up telling me about her funny dream—she said our whole house was made of numbers and shapes! We had a good laugh, but it actually gave me an interesting idea.

When she got home from school that day, I told her we were going to make her dream come true. “Let’s put math all through the house. We can label everything with a number or shape!” She thought that sounded like fun and got out sticky notes, construction paper, crayons, and tape.

First we labeled a window (“4 windowpanes”) and bookcase (“3 shelves”). Then, we cut sticky notes into circles, triangles, and rectangles. We put them onto matching shapes, such as a rectangle on the dishwasher door and a circle on her alarm clock.

We’ve left the labels up, and each day my daughter walks around the house saying the numbers and shapes. Her dream turned into a clever activity, and I’m happy that she’s practicing her math skills and vocabulary.



## MATH CORNER My first fractions

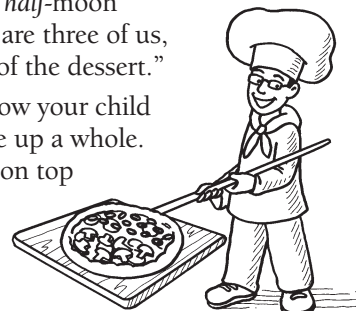
*Why?* Everything is made of matter. In this case, rocks are larger pieces of matter that take up more space, and they have more space between them. Grains of rice and sand are smaller bits of matter and have less space between them. The parts that make up water are even smaller and have even smaller spaces between them.

Quarter... half... whole... With these activities, fractions are a piece of cake for little ones:

- Use fractions in everyday conversation to get your youngster used to the words. You might say, “There’s a *half*-moon tonight,” or, “Since there are three of us, we can each have a *third* of the dessert.”
- Play with tortillas to show your child how fractional parts make up a whole. Have him lay one tortilla on top of another one and fold the top one in half. Ask him to fold it in half again—what does

that show? ( $\frac{1}{4}$  tortilla) He can see clearly how the half or quarter compares to the whole (the tortilla underneath).

- Make a “fraction pizza” for dinner. Let your youngster help you spread tomato sauce on a ready-made crust. Then, give him directions for the toppings (mushrooms on *half*, olives on the other *half*, and pepperoni on the *whole* pizza). He can tell your family what fractions make up their dinner!



## OUR PURPOSE

To provide busy parents with practical ways to promote their children’s math and science skills.  
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