Beginning Edition

Math+Science Connection

Building Excitement and Success for Young Children

December 2016

Title 1 Math Intervention
Liberty Hill ISD

TOOLS & TIDBITS

Compute creatively

Give your child a few math problems, and encourage her to use household objects to act them out. Let her be

creative with what she chooses! She might solve 5 – 2 = 3 with pickles or 7 + 4 = 11 with cookie cutters. Using what teachers call *manipulatives* (objects you can move around) will boost her understanding because they're hands-on.

Be a little chemist

For an early introduction to chemistry, suggest that your youngster squish together a few colors of play dough. Now, can he separate them back out? Nope, because he just bound them together. That's the same thing that happens when elements bond. They become something new—a compound!

Web picks

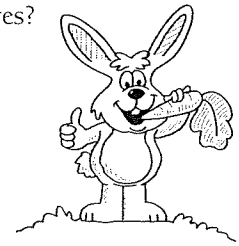
With a click and a drag, your child will be able to visualize place value while having fun at *learningbox.com/base10/BaseTen.html.*

If your youngster has never seen an aye-aye or a regal horned lizard, she could check out those creatures, and more, at *kids.nationalgeographic.com/animals.*

Just for fun

Q: How can you tell that carrots are good for your eyes?

A: You never see rabbits wearing glasses!



Pair and add

Pairing numbers together to make 5, 10, or 100 will simplify addition for your little math learner. Here's how.

Flash 5

See how quickly your youngster can put together a match that equals 5. Hold up some fingers on one hand. Have him show you with his fingers what number is missing to equal 5. If you hold up 2 fingers, he should "flash" 3 fingers and say the addition sentence, "2 + 3 = 5." Take turns, and when he's got it down, use both hands and create matches to 10.

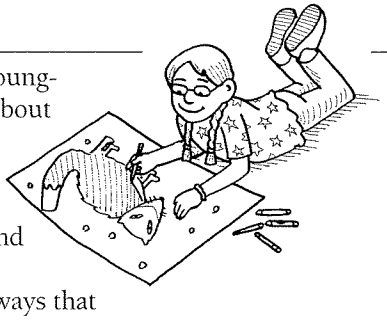
Fish for 10

Play Go Fish with a deck of cards (face cards and 10s removed, ace = 1). The object is to produce pairs equaling 10, such as 3 and 7. Deal 5 cards to each player, and stack the rest. Take turns asking for what you need. *Example:* If you have a 2, ask for an 8. If your opponent doesn't have it, draw a card. Lay down pairs of 10 as you go. (If you run out of cards, draw 5 more.) When no more pairs can be made, the player with the most pairs wins.

Pass to 100

Try "passing" numbers back and forth to make 100. Start by saying a multiple of 10, like 30. Your child says a number back to you that would add to 100. (With 30, he'd pass back 70.) If he's right, he "tosses" a number to you. Keep at it until he correctly passes numbers back every time.

Winter's on its way

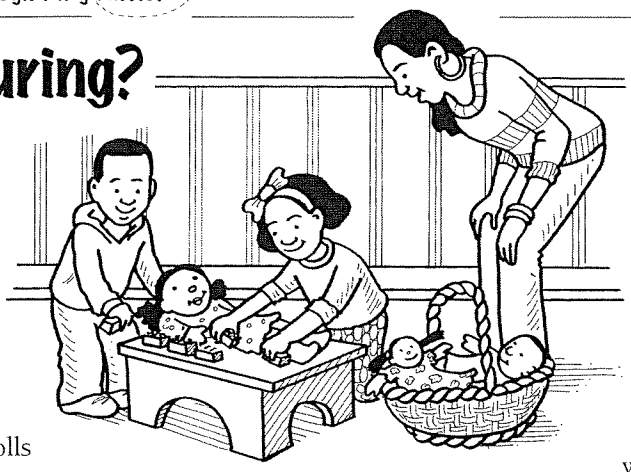


As colder weather sets in, encourage your youngster to help prepare for winter—and to think about what animals might be doing to prepare.

Ask her what clothing your family needs for cold weather (coats, boots, gloves). Then, she could help put away her summer clothes and pull out her winter gear.

What about animals? Together, brainstorm ways that animals get ready for winter, and let her illustrate her ideas. Perhaps she'll draw a picture of a fox growing thick fur, a bear finding a place to sleep, a squirrel storing food, or a bird flying south.

Why am I measuring?



Inches, ounces, and pounds... does your youngster know why we measure things? Use these ideas to explain.

Babies. Pull out pictures from when your child was a baby. You can tell her how the doctor checked her weight and length regularly to make sure she was growing properly.

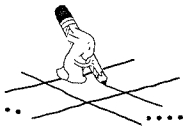
- Help her measure and weigh her dolls or stuffed animals. She could compare to see which ones are *longer* and *shorter* or *heavier* and *lighter*.

Shoes. When your youngster gets new shoes, the clerk measures her feet to see what size they are. That helps her find shoes that fit.

- Let your child measure your foot. She might line up Legos or paper clips, end to end, to see how many Legos-long or paper clips-long your foot is.

Produce. At the grocery store, point out the scale you use to weigh the fruits and vegetables, and explain how you pay for them by the pound.

- Have your youngster help you weigh the grapes or winter squash you're buying. Ask her to read the numbers on the scale to determine the ounces or pounds.

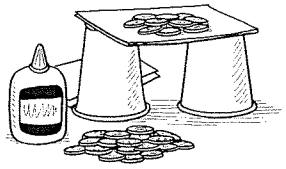


SCIENCE LAB Glue will keep us together

Amaze your youngster with this engineering experiment where a single layer of glue makes two index cards stronger.

You'll need: 2 plastic cups, ruler, 4 index cards, glue, 30 pennies

Here's how:



Have your child glue 2 index cards together and let them dry. Then, he can turn the cups upside down on a table (about 4 inches apart) and lay the two unglued cards on top, one over the other. Let him put pennies on the cards, counting one by one, until the cards tumble. How many pennies did they hold? Next, he should repeat his experiment with the glued cards.

What happens? The glued cards will hold more pennies.

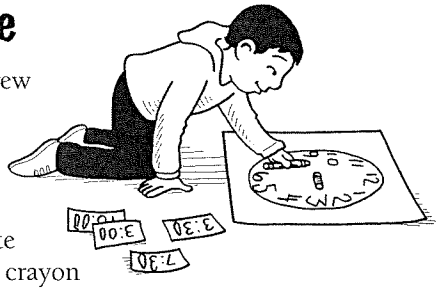
Why? Gluing the cards together makes them sturdier. This same principle of layering materials together is used to make building materials stronger.

OUR PURPOSE

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

Resources for Educators,
a division of CCH Incorporated
128 N. Royal Avenue • Front Royal, VA 22630
540-636-4280 • rfecustomer@wolterskluwer.com
www.rfeonline.com
ISSN 1942-910X

PARENT TO PARENT Time after time



In school, my son Andrew is learning about telling and writing time. His teacher suggested a fun way to work on this at home.

First, we needed to make a clock. So Andrew drew a circle on cardboard and wrote the numbers 1–12 around it. He used a long crayon as the minute hand and a broken crayon for the hour hand. Then on scrap paper, we wrote times like 3:30, 6:00, and 9:30.

To practice telling time, Andrew chooses 3 papers and moves his crayon "hands" to show those times. Or I show a time on the clock, and then Andrew finds the slip of paper that matches that time.

The more we do this, the better he's getting at telling time. Now he points at the kitchen clock when it's at an hour or a half-hour mark and tells me the time!

MATH CORNER Putting shapes where they go

Where, oh, where did that little square go? Is it left, right, or in the middle? With this geometry activity, your youngster and a friend will enjoy using shape and position words.

Materials: *construction paper, markers*

1. Have each person draw a tic-tac-toe board.

2. One player secretly adds a shape (square, circle, triangle, rectangle) into 3 or 4 spaces on her board.

3. She gives directions so her friend can match her board. *Examples:* "I have a square in the top middle space." "I have a circle in the bottom row on the right."

4. The other player uses the clues to draw the same shapes in the same places on his board.

5. When all the directions are given, compare boards. Are they the same?

6. Make new boards, and swap roles.