
Developing Number Sense

- Use story problems for operations. Your child may use manipulatives, pictures, numbers, or mental math to solve the problems.
 - a. Chris has 10 lollipops. Kim gave him 6 more. How many lollipops does Chris have now?
 - b. Mary has four pennies and Antwan has 6 pennies. They put all their pennies into a piggy bank. How many pennies did they put in the bank?
 - c. Tyrone has 6 cookies. He eats some and has 2 left. How many cookies did Tyrone eat?
 - d. Scout had 9 cupcakes. She ate 2 of them. How many cupcakes does Scout have left?
 - e. Bo has seven stickers. Shiloh has five stickers. How many more stickers does Bo have than Shiloh?
 - f. Lisa has some crayons. Vicki gave her four more. Now Lisa has nine crayons. How many crayons did Lisa have to start with?
 - g. Will and Harry put ten coins in a piggy bank. Will put in five pennies. Harry put in dimes. How many dimes did Harry put in the piggy bank?
 - h. How can 6 children share 18 stickers evenly? 36 stickers?
 - i. Kenny has 3 nickels and 2 pennies. How many coins does Kenny have? OR How much money does Kenny have? Vary the amount of coins each time.
 - j. A farmer has 2 cows and 3 chickens in his barn. How many legs are there? Draw a picture to show your answer.
 - k. There are 22 students in Jenna's class. If Jenna's mom bakes 2 cookies for each student, how many cookies must she bake?

More Number Sense

- How many ways can you represent the number 10?, 50?, 125?, etc. You can use manipulatives (buttons, etc.) numbers, or symbols.
- Use riddles such as the following: "I am thinking of a shape. It has 4 sides that are the same length. It has 4 corners. What shape am I thinking of?"
- Use Fruit Loops or some other cereal to make a pattern. Have your child describe the pattern.
- Predict the number of times you can write your name (or do jumping jacks, etc.) in one minute. Have your child try it and see how close his/her prediction was to the actual amount.
- Have your child keep track of the number of cans the family recycles and construct a chart or graph to display the data.
- Count backwards from 138 by 10s (or any other number in your child's range of knowledge).
- Ask your child to add 3 numbers on the calculator, such as $2 + 5 + 8$. Then, add the same number in a different order. What happens? (The sums are the same.) Try it again with different numbers. Discuss why this happens.

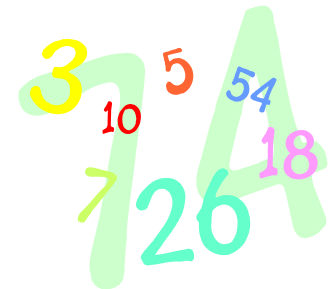
Number of the Day...

How many different ways can you show the number

12 ?

Math Activities for Families with Primary Students

Prekindergarten to Grade 2

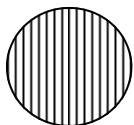
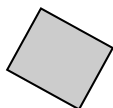


FACT: "On average, all students lose approximately 2.6 months of grade level equivalency in mathematical computation over the summer months if they don't have opportunities to practice their skills."

Johns Hopkins University, Center for Summer Learning, 2007

Mathematics in the Real World

- Look for numerals in the newspaper with your child. Have your child read the number.
- Have your child sort the laundry. Let him/her tell you about the groups he/she created in the sorting process.
- Use ordinal numbers as you describe a sequence. For example, you might describe the day's activities or put objects in order. (Ordinal numbers are first, second, third, fourth...)
- Go on a scavenger hunt in your house. Have your child find circles, squares, triangles, or rectangles. Discuss the attributes of the shape with your child, such as the number of sides.
- Have your child list 3 snacks you have at home. Then, your child may survey his/her friends and make a tally chart to show which snacks they like best.
- Take a handful of coins. Have your child count the money. Ask him/her if there is another way to show the same amount.
- Ask your child to show a money amount (27¢) using the least amount of coins.
- Make your child aware of the calendar. Discuss events that are coming up, such as sports practice, going to Grandma's, etc. Have your child think about how many days it is until the event, which month of the year, etc. Ask questions such as, "How many Thursdays are in March, April, and May?"
- Have your child tell time using an analog clock and a digital clock.



Don't Laugh— That's Math

Many times I've heard a parent say,

"I can't help my child in any way, but don't laugh—I can't do math."

I think for a minute before I say,

"Let's look at this another way.

Have you ever said, 'Wait a minute;

Here's a box with four things in it,'

'Let's take turns; you first, then me,'

Helped your child count the branches on a tree?

Then you're on the right path.

Don't laugh—that's math!"

Have you taught your child left and right?

Counted her toes in bed at night?

Repeated a favorite nursery rhyme?

Said good night just one more time?

Have you split a cookie right in half?

Formed a pattern on a snowy path?

Well, don't laugh—that's math!

Have you ever played a game?

Measured for a picture frame?

Have you cut chains for your Christmas tree?

Noticed a butterfly's wings have symmetry?

Did you ever check the miles into town?

Have you counted stairs both up and down?

Did you ever measure to see how tall?

Find the weight of her favorite doll?

Well, don't laugh—that's math!

Math can be seen in everything,

Even the songs we sing.

Multiplying, dividing, or even protracting.

Math exists all around us; We didn't find it—it found us!

Now remember, when my little poem is done,

If it has given you a small fraction of fun,

Don't laugh—that's math!

Literature and Math

- Read *The Very Hungry Caterpillar* by Eric Carle. Have your child count how many items the caterpillar ate each day. How much did he eat all together?



- Read *Shapes, Shapes, Shapes* by Tana Hoban and/or *The Greedy Triangle* by Marilyn Burns. See if your child can identify all of the shapes in the book.



- Read *Let's Fly a Kite* by Stuart Murphy. After reading, draw symmetrical shapes. *Note: Stuart Murphy has written many books that connect math to the real world.*



- Use *Inch by Inch* by Leo Lionni to begin a discussion about measurement. Let your child see a ruler and measure something in the house to the nearest inch. You may find it helpful to use a marker to highlight the inch markings on the ruler. School supply stores have rulers that just show inches. Older students may measure to the nearest half inch.

