

# *Do-Anytime Activities for Grades K-3*

Mathematics means more when it is rooted in real-life situations. The following activities allow children to practice mathematics skills while riding in a car, doing chores, helping with shopping, and performing other everyday routines. These "do-anytime" activities are organized by topic and grade level.

## **Visual Patterns, Number Patterns, and Counting**

- K** Count the steps needed to walk from the sidewalk to the front door (or any two places). Try to walk the same distance with fewer steps or with more steps.
- K** Practice counting past the "100 number barrier." Start from different numbers, such as 81, 92, 68, and so on.
  - 1** Count orally by 2s, 5s, and 10s.
  - 1** Count and pair objects found around the house, and determine whether there's an odd or even number of items.
  - 2** Make a game out of doubling, tripling, and quadrupling small numbers.
  - 2** Ask your child to count by certain intervals. For example, "Start at zero, and count by 4s."

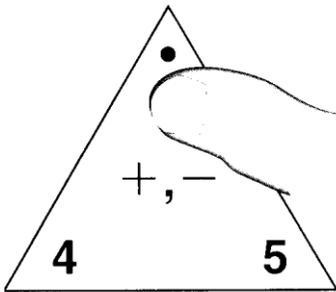
## **Addition Subtraction, Multiplication, and Division**

- K** Show your child three objects, and count them aloud together. Then put the objects in your pocket, a box, or a bag. Put two more objects in with the three objects, and ask your child, "How many are in there now?" Repeat with other numbers and with subtraction (taking objects out of the pocket, box, or bag).
- K** Make up "one more" and "one less" stories. Have your child use counters, such as pennies or raisins. For example, "The dinosaur laid 5 eggs." (Your child puts down 5 counters.) "Then the dinosaur laid one more egg." (Your child puts down another counter.) "How many eggs are there?"

- Using the number grid, select a number, and have your child point to the number that is 1 more or 1 less than the selected number. Do problems like this: "Count back (or up) 5 spaces. On which number do you land?"

0

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
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50



- Using the Fact Triangles, cover the sum for addition practice. Cover one of the other numbers for subtraction practice. Make this brief and fun.
- Have your child explain how to use a facts table.
- Practice addition and subtraction fact extensions. For example,
   
 $6 + 7 = 13$        $60 + 70 = 130$        $600 + 700 = 1,300$
- Provide your child with problems with missing factors for multiplication practice. For example, "6 times what number equals 18?"

## Number Stories

- K** Encourage your child to figure out answers to real-life situations: "We have one can of tuna, and we need five. How many more do we need to buy?"
- Have your child tell you a number story that goes with a given number
    - Ask for answers to number stories that involve two or more items. For example, "I want to buy a doughnut for 45 cents and a juice box for 89 cents. How much money do I need?" (\$1.34)
    - Make up number stories involving estimation. For example, pretend that your child has \$2.00 and that he or she wants to buy a pencil marked 64¢, a tablet marked 98¢, and an eraser marked 29¢. Help your child to estimate the total cost of the three items (without tax) and to determine if there is enough money to buy them.
    - Take turns making up multiplication and division number stories to solve. Share solution strategies.
    - Ask questions that involve equal sharing. For example, "Seven children share 49 baseball cards. How many cards does each child get?"
    - Ask questions that involve equal groups. For example, "Pencils are

## Place Value

- K** Have your child press the number 3 on a calculator. Have him or her press another 3 and read the number. Repeat for 333 and 3,333.
- 0** Say a 2- or 3-digit number. Then have your child identify the actual value of the digit in each place. For example, in the number 952, the value of the 9 is 900; the value of the 5 is 50; and the value of the 2 is 2 ones, or two.



- 2 Say a 3- or 4-digit number. Then have your child identify the actual value of the digit in each place. For example, in the number 3,587, the value of the 3 is 3,000; the value of the 5 is 500; the value of the 8 is 80; and the value of the 7 is 7 ones, or 7.
- 3 Write decimals for your child to read, such as 0.32 (thirty-two hundredths) and 0.9 (nine-tenths).

Thousands	Hundreds	Tens	Ones	.	Tenths	Hundredths	Thousandths
1,000	100	10	1	.	.1	.01	.001

## Money and Time

- K** Start a family penny jar, and collect your family's pennies. Count them from time to time.
- K** Teach your child how to set the kitchen timer when you are cooking.
- 1 Count various sets of nickels and pennies together.
  - 1 Have your child tell you the time as "minutes after the hour."
  - 2 Gather a handful of coins with a value less than \$2. Have your child calculate the total value.
  - 2 Ask the time throughout the day. Encourage alternate ways of naming time, such as *twenty to nine* for 8:40 and *half past two* for 2:30.
  - 3 Have your child write the following amounts using a dollar sign and decimal point: 4 dollar bills, 3 dimes, and 2 pennies; 4 dimes and 8 pennies; 3 dollar bills and 8 dimes; 8 pennies. © Draw an analog clock face with the hour and minute hands showing 8 o'clock. Ask your child to write the time shown. Repeat with other times, such as 3:30, 11:45, 7:10, and so on.



## Measurement

- K** Arrange various objects (books, boxes, and cans) by various size and measure (length, weight, and volume) attributes. Talk with your child about how they are arranged using comparison words like *taller*, *shorter*, *narrower*, *wider*, *heaviest*, *lightest*, *more*, *less*, *about*, and *the same*.
- K** Record family heights by marking them on a door frame. Record in centimeters as well as inches. Measure again in the same location several months later.
- 1 Use a standard measuring tool (a ruler, a tape measure, or a yardstick) to measure objects located in the house. Keep an ongoing list of items measured and their approximate lengths and widths using inches.
  - 2 Discuss household tools that can be used to measure things or help solve mathematical problems.
  - 2 Gather a tape measure, a yardstick, a ruler, a cup, a gallon container, and a scale. Discuss the various things you and your child can measure with each. Compare to see which is the best tool for different types of measurement. For example, "What would you use to measure the length of a room: a tape measure, a yardstick, or a ruler?"
  - 2 Review equivalent names for measurements. For example, "How many cups in a pint?"



## Fractions

- K** As you cut a pizza into equal pieces, count the pieces, and describe the pieces with their fraction names. For example, if you cut a pizza into four pieces, then each piece is  $\frac{1}{4}$  of the whole pizza.
- K** Compare the sizes of the pieces as you divide a pizza into smaller and smaller sections. "Is  $\frac{1}{2}$  of the pizza smaller or larger than  $\frac{1}{4}$  of the pizza?"
- 1** Count out eight pennies (or any type of counter, such as beans or macaroni). Ask your child to show you 2 of the pennies and then 4 of the pennies. Do this with a variety of numbers.
- 1** Give your child several pieces of paper to fold into halves, fourths, or eighths. He or she can label each part with the appropriate fraction symbol ( $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ .)

Read a recipe, and discuss the fractions in it. For example, ask, "How many  $\frac{1}{4}$  cups of sugar would we need to get 1 cup of sugar?"

Compare two fractions, and tell which is larger. For example, ask, "Which would give you more of a pizza:  $\frac{1}{8}$  of it or  $\frac{1}{4}$ ?"

Help your child find fractions in the everyday world—in advertisements, on measuring tools, in recipes, and so on.

Draw name-collection boxes for various numbers, and together with your child, write five to ten equivalent names in each box. Include name-collection boxes for fractions and decimals. For example, a  $\frac{1}{2}$  name-collection box might include  $\frac{2}{4}$ ,  $\frac{10}{20}$ , 0.5, 0.50, 500/1,000, and so on.

## Geometry

- K** Play "I Spy" with your child. Begin with easy clues, and work up to more difficult ones. For example, "I spy something that is round." "I spy something that is round and has two hands." "I spy something that has four legs and is a rectangle."
- K** Look around the house for different geometric shapes, such as triangles, squares, circles, and rectangles.
- 1** Look for geometric shapes around the house, at the supermarket, as part of architectural features, and on street signs. Begin to call these shapes by their geometric names.
- 2** Look for 2- and 3-dimensional shapes in your home and neighborhood. Explore and name the shapes, and brainstorm about their characteristics.
- 2** Use household items (such as toothpicks and marshmallows; straws; and twist-ties, sticks, and paper) to construct shapes.
- 3** Begin a Shapes Museum, a collection of common objects that represent a variety of 2- and 3-dimensional shapes. Label the shapes.
- 3** Search for geometric figures with your child. Identify them by name if possible, and talk about their characteristics. For example, a stop sign is an octagon, which has 8 sides and 8 angles. A brick is a rectangular prism, in which all faces are rectangles.