# **Content Emphasized in Grade 5**



In *Everyday Mathematics*, students develop a broad background by learning concepts and skills in these six content strands. The fifth-grade program emphasizes the following content.

#### **Number and Numeration**

Recognizing place value in numerals for whole numbers and decimals; expressing numbers in scientific notation; finding factors of numbers; comparing properties of prime and composite numbers; representing rates and ratios with fraction notation

# **Operations and Computation**

Extending whole-number facts with addition, subtraction, multiplication, and division to fractions and decimals; evaluating symbolic expressions

#### **Data and Chance**

Collecting, organizing, and analyzing data using bar graphs, line graphs, circle graphs, and stem-and-leaf plots

# **Measurement and Reference Frames**

Using linear, area, capacity, and personal reference measures; locating items with reference to an origin or zero point, for example, ordinal numbers, times of day, dates, and temperatures

## Geometry

Investigating angles and rotations; calculating area and volume; drawing to scale; introducing relationships of 2-dimensional and 3-dimensional figures; exploring new transformations that affect attributes of geometric shapes

### Patterns, Functions, and Algebra

Determining divisibility; exploring number patterns; applying formulas to geometric figures; creating number models; working with scientific calculators; squaring and unsquaring numbers; exploring variables in formulas

For a lesson-by-lesson view of the way students learn this content, see the Grade 5 Content by Strand Poster.

# **Do-Anytime Activities for Grade 5**



These activities are easy and fun to do with your child at home, and they will reinforce the skills and concepts your child is learning in school.

Unit 1	◆ Ask your child to name as many factors as possible for a given number such as 24 (1, 24, 6, 4, 12, 2, 8, 3). To make sure the factors are correct, your child can multiply them with a calculator.
Unit 2	◆ Practice extending multiplication facts. Write each set of problems so that your child may recognize a pattern. Set A: 6 * 10, 6 * 100, 6 * 1,000; Set B: 5 * 10, 5 * 100, 5 * 1,000.
	<ul> <li>♦ When your child adds or subtracts multi-digit numbers, talk about the strategy that works best for him or her. Try not to impose the strategy that works best for you! Here are some problems to try: 467 + 343; 761 + 79; 894 - 444; 842 - 59.</li> </ul>
Unit 3	<ul> <li>To learn more about population data and its uses, visit the Web site for the U.S. Bureau of the Census at www.census.gov. Have your child write three interesting pieces of information that he or she learned.</li> </ul>
	• Draw various angles: acute (less than 90°), obtuse (between 90° and 180°), and right (90°). Ask your child to estimate each angle measurement and then use a protractor to find the actual measurement. Compare the results. Switch roles, letting your child draw angles for you to estimate and measure.
Unit 4	• Find a map of your state and ask your child to use the scale to find the distance from a particular city to another city.
Unit 5	<ul> <li>Identify percents used in stores, newspapers, and magazines. Help your child find the sale price of an item that is discounted by a percent. For example, a \$40 shirt discounted by 25% will cost \$30.</li> </ul>
	• Practice writing numbers as a fraction and then as a decimal. Try one-fourth $(\frac{1}{4}, 0.25)$ , three-tenths $(\frac{3}{10}, 0.3)$ and so on.
Unit 6	• Have your child practice adding fractional parts of an hour with a digital clock. Ask questions, such as "What time will it be an hour and a half from now? What was the time a quarter of an hour ago?"
	Practice adding and subtracting fractions with the same denominator.

Unit 7	• Encourage your child to recognize how probability is used in everyday situations, such as weather reports. Have your child make a list of things that could <i>never happen</i> , things that <i>might happen</i> , and things that are <i>sure to happen</i> .
Unit 8	<ul> <li>Have your child measure the perimeters of rooms in your house or of household objects. Then have him or her find the areas of the objects.</li> <li>Help your child draw a scale map of your city, town, neighborhood,</li> </ul>
	or have your child do a scale drawing of the floor plan of your home.
Unit 9	◆ Have your child look for everyday uses of fractions and percents. Look in games, grocery stores, cookbooks, measuring cups, and newspapers. When finding fractions, decimals, or percents, ask your child to change them from one form to another. For example, if you see " <sup>1</sup> / <sub>4</sub> off," ask your child to tell what percent is equal to <sup>1</sup> / <sub>4</sub> (25%).
	• Write whole numbers and decimals for your child to read, such as 650.02 (six hundred fifty and two-hundredths). Ask your child to identify the digits in the various places in the numbers—hundreds place, tens place, ones place, tenths place, and so on.
Unit 10	<ul> <li>Have your child look for repeating borders or frieze patterns (a design made of shapes that are in a line or lined up) on buildings, rugs, and floors. Your child may want to sketch the friezes or draw original patterns.</li> </ul>
	<ul> <li>◆ Use sidewalk chalk to make a number line with positive and negative numbers. Have your child solve addition and subtraction problems by walking on the number line. For example: to solve −2 + 6, your child would start on −2 and walk to the right six numbers to find the sum. Switch roles. For an inside activity, use paper, pencil, and fingers.</li> </ul>
Unit 11	Have your child find the volume of various rectangular prisms around your house, such as shoe boxes and fish tanks.
Unit 12	• During trips in the car, let your child know how far you will be traveling and the approximate speed you'll be driving.  Ask your child to estimate about how long it will take to get to your destination.
	<ul> <li>When grocery shopping, ask your child to help you find the "best buy" by comparing the cost per unit (ounce, gram, each) of different package sizes. For example, compare the unit cost of a family-size box of cereal with the unit cost of a regular-size box.</li> </ul>