



Background

- ◆ Developed by the University of Chicago School Mathematics Project
- ◆ Based on research about how children learn and develop mathematical power
- ◆ Provides the broad mathematical background needed in the 21st century

In *Everyday Mathematics* you can expect to see...

- ...a problem-solving approach based on everyday situations;
- ...an instructional approach that revisits concepts regularly;
- ...frequent practice of basic skills, often through games;
- ...lessons based on activities and discussion, not a textbook; and
- ...mathematical content that goes beyond basic arithmetic.

How Children Learn in *Everyday Mathematics*



Think about the master chefs you see on television—how do they acquire their knowledge and skills? No one starts out chopping onions at high speed, inventing their own dishes, or running a restaurant! Chefs develop their cooking expertise over time, starting with basic skills and easy recipes. Gradually, they practice these skills, learn important food science concepts, and gain experience by cooking in many different restaurants.

In a similar way, *Everyday Mathematics* is based on the idea that children build understanding and develop skills as a result of many meaningful and connected learning experiences. Mastery of mathematics concepts and skills comes with repeated exposure and practice, not after just one lesson. This enables children to make new connections and build on the mathematical content they already know while gradually learning more difficult and challenging content. Think of this process as climbing a spiral staircase—with each twist of the stairs, the previous steps can be seen, but you are farther and higher.

To help children develop mastery, you may notice the mathematical content in this program is taught in a repeated fashion, first with informal exposure and then through more formal and directed instruction. For example, children will have many different hands-on experiences with subtraction—they will take items away from a set, count backwards on a number line, and make up number stories—before they learn pencil-and-paper procedures for subtraction.

The design of *Everyday Mathematics* allows your child to gain a more genuine understanding of mathematical concepts, a much more solid mathematical foundation, and exposure to the entire scope of mathematics each year.

How can you help? Because homework is one way children revisit concepts, you can support your child by helping with Home Links and playing math games at home when they are assigned.



Content Emphasized in Grade 3



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

Number and Numeration

Counting patterns; place value; reading and writing whole numbers through 1,000,000; fractions, decimals, and integers

Operations and Computation

Practicing multiplication and division facts extended to multidigit problems; working with properties; operations with fractions and money

Data and Chance

Collecting, organizing, and displaying data using tables, charts, and graphs; using basic probability terms

Measurement and Reference Frames

Recording equivalent units of length; recognizing appropriate units of measure for various items; finding the area of rectangles by counting squares; using multiplication arrays, coordinate grids, thermometers, clocks, calendars, and map scales to estimate distances

Geometry

Exploring 2-dimensional and 3-dimensional shapes and other geometric concepts

Patterns, Functions, and Algebra

Finding patterns on the number grid; solving Frames-and-Arrows puzzles having two rules; completing variations of "What's My Rule?" activities; exploring the relationship between multiplication and division; using parentheses in writing number models; naming missing parts of number models

For a lesson-by-lesson view of the way children learn this content, see the Grade 3 *Content by Strand* Poster.