



## Introduction to *Second Grade Everyday Mathematics*

Welcome to *Second Grade Everyday Mathematics*. It is a part of an elementary school mathematics curriculum developed by the University of Chicago School Mathematics Project.

Several features of the program are described below to help familiarize you with the structure and expectations of *Everyday Mathematics*.

### A problem-solving approach based on everyday situations

By making connections between their own knowledge and their experiences both in school and outside of school, children learn basic math skills in meaningful contexts so the mathematics becomes "real."

**Frequent practice of basic skills** Instead of practice presented in a single, tedious drill format, children practice basic skills in a variety of more engaging ways. Children will complete daily review exercises covering a variety of topics, find patterns on the number grid, work with addition and subtraction fact families in different formats, and play games that are specifically designed to develop basic skills.

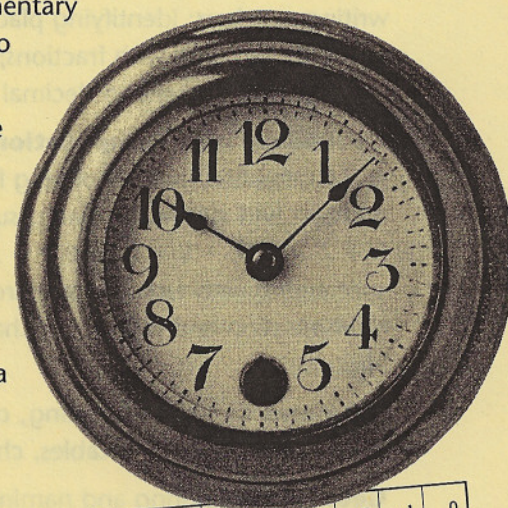
### An instructional approach that revisits concepts regularly

To improve the development of basic skills and concepts, children regularly revisit previously learned concepts and repeatedly practice skills encountered earlier. The lessons are designed to build on concepts and skills throughout the year instead of treating them as isolated bits of knowledge.

### A curriculum that explores mathematical content beyond basic arithmetic

Mathematics standards around the world indicate that basic arithmetic skills are only the beginning of the mathematical knowledge children will need as they develop critical-thinking skills. In

addition to basic arithmetic, *Everyday Mathematics* develops concepts and skills in the following topics—number and numeration; operations and computation; data and chance; geometry; measurement and reference frames; and patterns, functions, and algebra.



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*Second Grade Everyday Mathematics* emphasizes the following content:

**Number and Numeration** Counting; reading and writing numbers; identifying place value; comparing numbers; working with fractions; using money to develop place value and decimal concepts

**Operations and Computation** Recalling addition and subtraction facts; exploring fact families (related addition and subtraction facts, such as  $2 + 5 = 7$ ,  $5 + 2 = 7$ ,  $7 - 5 = 2$ , and  $7 - 2 = 5$ ); adding and subtracting with tens and hundreds; beginning multiplication and division; exchanging money amounts

**Data and Chance** Collecting, organizing, and interpreting data using tables, charts, and graphs

**Geometry** Exploring and naming 2- and 3-dimensional shapes

**Measurement** Using tools to measure length, weight, capacity, and volume; using U.S. customary and metric measurement units, such as feet, centimeters, ounces, and grams

**Reference Frames** Using clocks, calendars, thermometers, and number lines

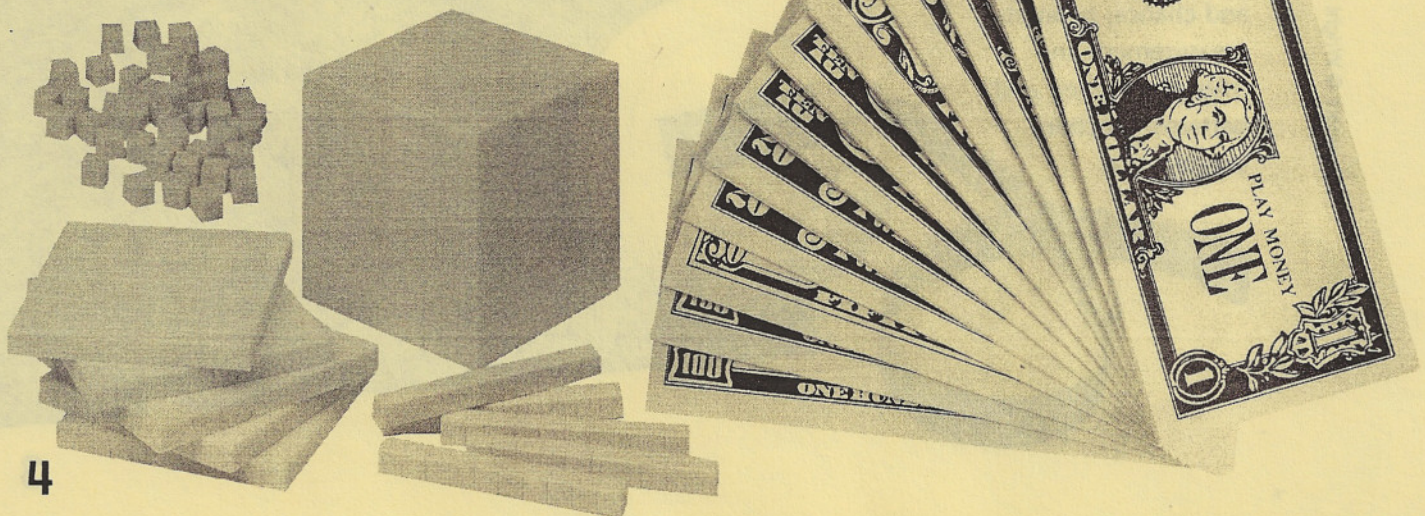
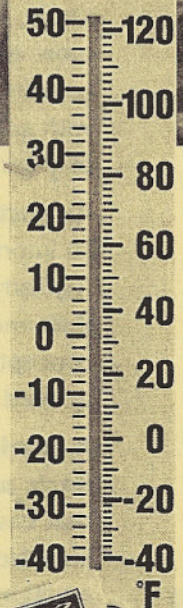
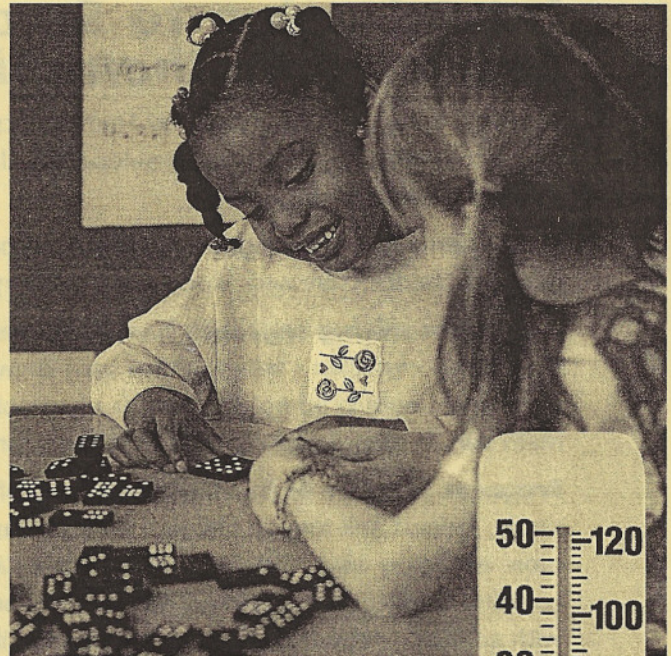
**Patterns, Functions, and Algebra** Exploring number patterns, rules for number sequences, relations between numbers, and attributes

*Everyday Mathematics* provides you with many opportunities to monitor your child's progress and to participate in your child's mathematics experiences.

Throughout the year, you will receive Family Letters to keep you informed of the mathematical content that your child will be studying in each unit. Each letter includes a vocabulary list, suggested Do-Anytime Activities for you and your child, and an answer guide to selected Home Link (homework) activities.

You will enjoy seeing your child's confidence and comprehension soar as he or she connects mathematics to everyday life.

We look forward to an exciting year!



## Unit 1: Numbers and Routines

This unit reacquaints children with the daily routines of *Everyday Mathematics*. Children also review and extend mathematical concepts that were developed in *Kindergarten Everyday Mathematics* and *First Grade Everyday Mathematics*.

In Unit 1, children will ...

- ◆ Count in several different intervals—forward by 2s from 300, forward by 10s from 64, backward by 10s from 116, and so on.
- ◆ Practice addition facts, such as  $5 + 4 = ?$  and  $? = 7 + 5$ .
- ◆ Review whole numbers by answering questions like “Which number comes after 57? After 98? After 234?” and “Which number is 10 more than 34? 67? 89?”
- ◆ Respond to prompts like “Write 38. Circle the digit in the 10s place. Put an X on the digit in the 1s place.”
- ◆ Work with a number grid to reinforce place-value skills and observe number patterns.

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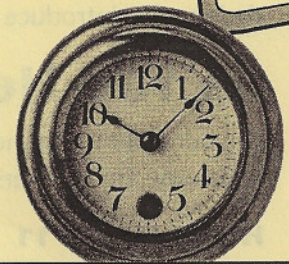
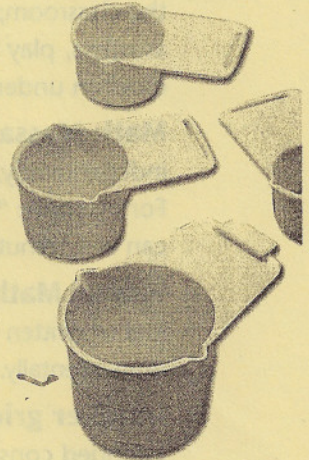
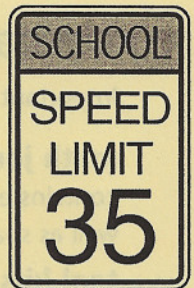
← Children use number grids to learn about ones and tens digits and to identify number patterns, such as multiples of three.

- ◆ Review equivalent number names, such as  $10 = 5 + 5$ ,  $10 = 7 + 3$ ,  $10 = 20 - 10$ , and so on.
- ◆ Play games, such as *Addition Top-It*, to strengthen number skills.
- ◆ Practice telling time and using a calendar.

### Do-Anytime Activities

To work with your child on the concepts taught in this unit, try these interesting and rewarding activities:

1. Discuss examples of mathematics in everyday life: television listings, road signs, money, recipe measurements, time, and so on.
2. Discuss rules for working with a partner or in a group.
  - ◆ Speak quietly.     ◆ Be polite.     ◆ Help each other.
  - ◆ Share.             ◆ Listen to your partner.
  - ◆ Take turns.        ◆ Praise your partner.
  - ◆ Talk about problems.
3. Discuss household tools that can be used to measure things or help solve mathematical problems.



SOFTBALL PARK		
HOME	INNING	VISITOR
3	7	10
BALL ••	STRIKE •	OUT •

## Vocabulary

Important terms in Unit 1:

**math journal** A book used by each child; it contains examples, instructions, and problems, as well as space to record answers and observations.

**tool kits** Individual zippered bags or boxes used in the classroom; they contain a variety of items, such as rulers, play money, and number cards, to help children understand mathematical ideas.

**Math Message** A daily activity children complete independently, usually as a lead-in to the day's lesson. For example: "Count by 10s. Count as high as you can in 1 minute. Write down the number you get to."

**Mental Math and Reflexes** A daily whole-class oral or written activity, often emphasizing computation done mentally.

**number grid** A table in which numbers are arranged consecutively, usually in rows of ten. A move from one number to the next within a row is a change of 1; a move from one number to the next within a column is a change of 10.


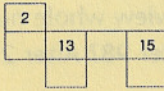

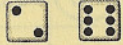
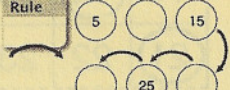
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**Exploration** A small-group, hands-on activity designed to introduce or extend a topic.

**Math Boxes** Math problems in the math journal that provide opportunities for reviewing and practicing previously introduced skills.

Date \_\_\_\_\_ Time \_\_\_\_\_

LESSON 1.9 Math Boxes

- How much money?  
  
 \_\_\_\_\_ ¢
- Fill in the missing numbers.  

- Show 23 with tally marks.  
 \_\_\_\_\_
- What time is it?  
  
 In  $\frac{1}{2}$  hour, it will be \_\_\_\_\_.
- Solve. Fill in the circle next to the best answer.  
  
 \_\_\_\_\_ + 6 = 8  
 (A) 14  
 (B) 2  
 (C) 8  
 (D) 10
- Write the arrow rule. Fill in the missing frames.  
  
 Rule \_\_\_\_\_

thirteen 13

**Home Links** Problems and activities intended to promote follow-up and enrichment at home.



## As You Help Your Child with Homework

As your child brings home assignments, you may want to go over the instructions together, clarifying them as necessary. The answers listed below will guide you through this unit's Home Links.

### Home Link 1.11

- <
- >
- >
- =
- Answers vary.
- Answers vary.

### Home Link 1.12

