Name Date Time

Family Letter

Home Link

Introduction to Third Grade Everyday Mathematics

Welcome to *Third Grade Everyday Mathematics.* It is part of an elementary school mathematics curriculum developed by the University of Chicago School Mathematics Project. *Everyday Mathematics* offers children a broad background in mathematics.

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 that 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. In addition to completing daily review exercises covering a variety of topics, patterning on the number grid, and working with addition and subtraction fact families in different formats, children will play games that are specifically designed to develop basic skills.

An instructional approach that revisits concepts regularly To enhance the development of basic skills and concepts, children regularly revisit previously learned concepts and repeatedly practice skills encountered earlier. The lessons are designed to take advantage of previously learned concepts and skills and to build on them 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—numeration; operations and computation; data and chance; geometry; measurement and reference frames; and patterns, functions, and algebra.

Third Grade Everyday Mathematics emphasizes the following content:

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

Operations and Computation 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

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

Measurement Recording equivalent units of length; recognizing appropriate units of measure for various items; finding the areas of rectangles by counting squares

Reference Frames Using multiplication arrays, coordinate grids, thermometers, and map scales to estimate distances

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

Everyday Mathematics will provide you with ample 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 your child will be studying in each unit. Each letter will include 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: Routines, Review, and Assessment

The first purpose of Unit 1 is to establish routines that children will use throughout the school year. The second purpose is to review and extend mathematical concepts that were developed in previous grades.

In Unit 1, children will look for examples of numbers for the Numbers All Around Museum. Examples of numbers might include identification numbers, measures, money, telephone numbers, addresses, and codes. Children will also look at number patterns in a problem-solving setting by using number-grid puzzles and Frames-and-Arrows diagrams. (See examples on the next page.)

Throughout Unit 1, children will use numbers within the context of real-life situations. After reviewing place-value concepts, children will work with money and pretend to purchase items from a vending machine and a store. The emphasis on applying numbers to the real world is also reflected in the yearlong Length-of-Day Project, a weekly routine that involves collecting, recording, and graphing sunrise/sunset data.

Vocabulary

Important terms in Unit 1:

digits The symbols from 0 through 9 that are used—sometimes in conjunction with other symbols—to record any number in our numbering system.

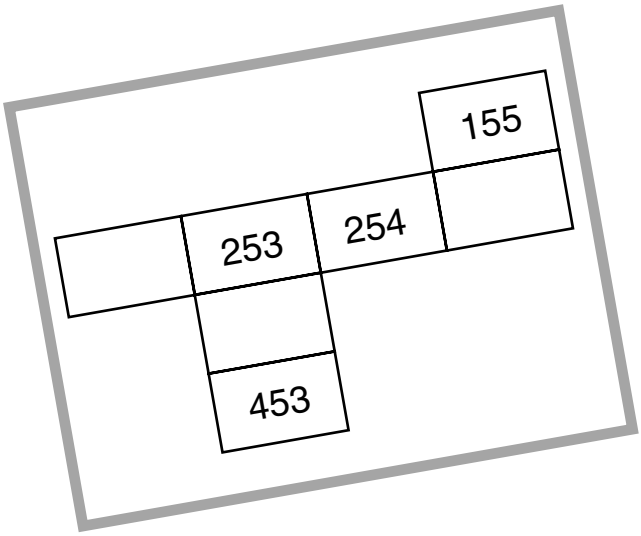
estimate The calculation of a close, rather than an exact, answer.

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.

number grid A table in which numbers are arranged consecutively, usually in rows of 10. 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.

									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

number-grid puzzle A piece of the number grid in which some, but not all, of the numbers are missing. Number-grid puzzles are used for reinforcing place-value concepts.



range The difference between the greatest and the least numbers in a set of data. In the set of data below, 9 is the range (41 − 32 = 9).

32 33 35 35 36 40 41

mode The value that occurs most often in a set of data. In the set of data above, 35 is the mode.

name-collection box A boxlike diagram tagged with a given number and used for collecting equivalent names for that number.

300

three hundred

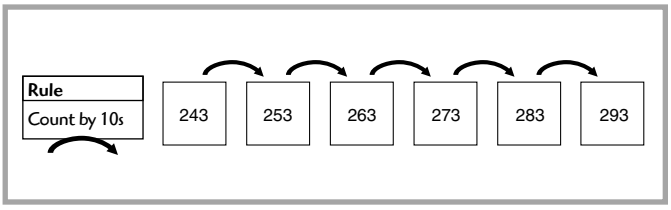
310 − 10

150 + 150

260 + 40

300 − 0

Frames and Arrows Diagrams that are used to represent number sequences, or sets of numbers that are ordered according to a rule. These problem-solving diagrams consist of frames connected by arrows to show the path from one frame to the next. Each frame contains a number in the sequence; each arrow represents a rule that determines which number goes in the next frame.



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 1.2

2. 000800 **3.** 000810 **4.** 000910
5. 001910 **6.** 1,111 miles

Home Link 1.3

Sample answers:

1. ②,4~~8~~0 **2.** 2,560 **3.** 2,450
4. 100 **5.** 299 **6.** 990 **7.** 4,900

Home Link 1.4

2. 8:00 **3.** 3:30 **4.** 6:15 **5.** 11:45
6. 7:10 **7.** 5:40

Home Link 1.5

1.

Time Spent Watching TV	
Hours	Children
0	/
1	//
2	//
3	////
4	/
5	/

2. 0 **3.** 5 **4.** 5 **5.** 3

Home Link 1.6

1. 18 Sample answers:

10 + 5 + 3	double 9
9 − 1 + 10	eighteen
20 − 2	10 less than 28
//// //// //// ///	9 + 9

2. 12

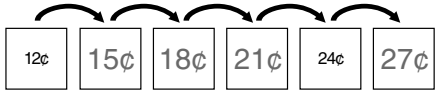
~~//// //// ////~~	one dozen
7 + 5	number of months in 1 year
15 − 3	10 + 2
~~18 − 4~~	~~9 − 3~~

Home Link 1.7

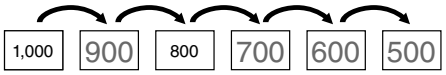
2. 154; 23 **3.** 148; 29 **4.** 169; 29
5. 22 **6.** 28

Home Link 1.11

1. Rule: +3¢



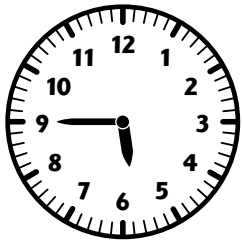
2. Rule: −100



4. $1.46 **5.** $0.87 **6.** $12.06

Home Link 1.12

1. a.

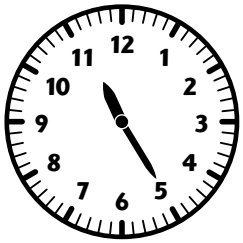


b.

2. a.

b.

3. a.



b.

4. 1 hour 35 min