

NAME _____

DATE _____

Place Value and Measurement

In Unit 4 your child will tell and write times using analog and digital clocks and discuss how to use *A.M.* and *P.M.* to specify the time of day.

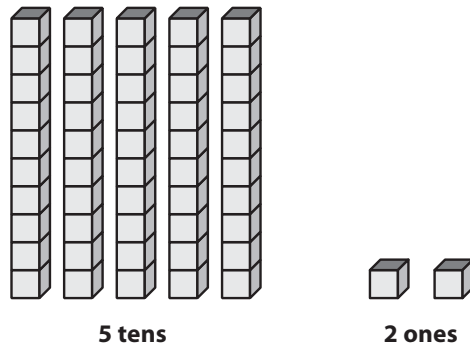
Children will read, write, and compare numbers from 0 through 999, building on concepts and skills explored in *Everyday Mathematics* for Kindergarten and first grade. They will also review and extend their understanding of place value, which is the system that gives each digit a value according to its position in a number. In the number 52, for example, the 5 represents 5 tens (or 50), and the 2 represents 2 ones (or 2).



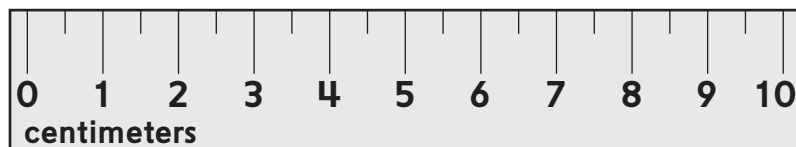
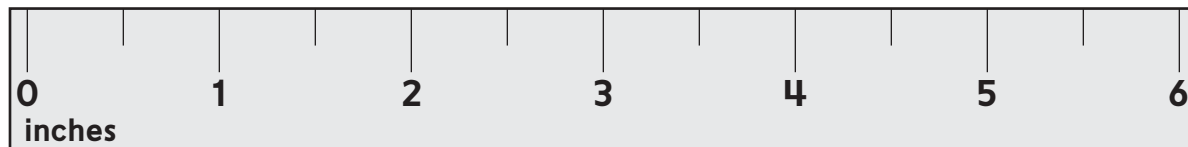
Unit 4 also focuses on estimating and measuring lengths using inches, centimeters, and feet. Children will learn that measurements are not exact, and they will use terms such as *close to*, *a little more than*, *a little less than*, *between*, and *about* when describing measurements.

Math Tools

Children will use **base-10 blocks** to help them understand place value. These blocks represent the number 52.



Your child will use rulers marked with standard units to measure length. *Everyday Mathematics* uses both U.S. customary and metric units.



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Vocabulary

Important terms in Unit 4:

analog clock A clock that shows time by the position of the hour and minute hands.



digital clock A clock that shows time with numbers of hours and minutes, usually separated by a colon.



base-10 blocks In *Second Grade Everyday Mathematics*, a set of blocks for representing ones, tens, and hundreds.

cube A base-10 block representing 1 in *Second Grade Everyday Mathematics*.



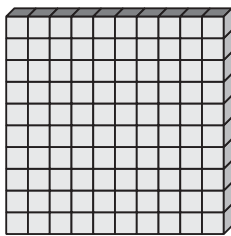
cube

long A base-10 block representing 10 in *Second Grade Everyday Mathematics*.



long

flat A base-10 block representing 100 in *Second Grade Everyday Mathematics*.



A flat

base-10 shorthand Simple drawings of base-10 blocks used to quickly record work.



Base-10 shorthand

digit Any one of the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9. Numbers are made up of digits. The number 145, for example, is made up of the digits 1, 4, and 5. In the base-10 number system the value of a digit depends on its place in the number. In the number 145 the digit 1 is worth 100 because it is in the hundreds place.

standard unit A unit of measure that has been defined by a recognized authority, such as a government or a standards organization. Inches, feet, and centimeters are examples of standard units.

foot (ft) A U.S. customary unit of length equal to 12 inches.

inch (in.) A U.S. customary unit of length equal to $\frac{1}{12}$ of a foot.

centimeter (cm) A metric unit of length equal to $\frac{1}{100}$ of a meter.

Do-Anytime Activities

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

1. Have your child tell the time shown on an analog clock to the nearest half hour or 5 minutes, depending on your child's skill level. By the end of second grade, children are expected to tell time to the nearest 5 minutes.
2. Draw an analog clock without hands. Say or write a time and have your child draw hands in the correct positions on the clock face.
3. Ask your child to tell you the value of a digit in any 3-digit number. In 694, for example, the 6 is worth 600, the 9 is worth 90, and the 4 is worth 4.

4. Name pairs of numbers and ask your child to determine which number is larger.
5. Discuss the different things you could measure with a ruler or a tape measure, such as the length of a book, the height of a table, or the distance from the refrigerator to the sink. Have your child give an estimate of a length or distance before measuring. Record the data and continue periodically to measure things with your child.

Building Skills through Games

In Unit 4 your child will practice mathematical skills by playing the following games.

Evens and Odds

Each player draws a card. If the card shows an even number, the player writes that number as a sum of two equal numbers. (For 6, the child writes $3 + 3 = 6$.) If the card shows an odd number, the player writes that number as the sum of two equal numbers plus or minus 1. (For 7, the child writes $3 + 3 + 1 = 7$ or $4 + 4 - 1 = 7$.)

Addition Top-It

Each player draws two number cards and adds the two numbers. The player with the larger sum takes all four cards.

Number Top-It

Each player uses two or more cards to build a multidigit number. The player with the largest number wins the round.

Target

Players draw number cards to create 1- and 2-digit numbers and use base-10 blocks to represent them. Players add or subtract each new number from their current total until the blocks on one player's mat have a value of exactly 50.

The Exchange Game (with Base-10 Blocks)

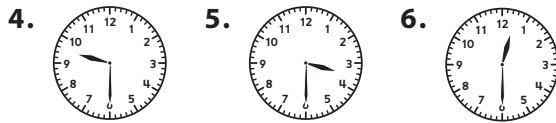
Each player rolls a die and collects that number of base-10 cubes from the bank. As players accumulate cubes, they exchange 10 cubes for 1 long. As they accumulate longs, they exchange 10 longs for 1 flat.

As You Help Your Child with Homework

When your child brings home assignments, you may want to go over the instructions together, clarifying them as necessary. The following answers will guide you through the Unit 4 Home Links.

Home Link 4-1

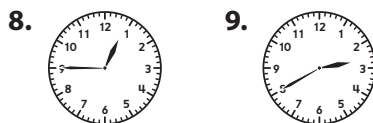
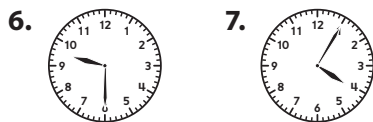
1. 4:00 2. 8:30 3. 11:30



7. 11 8. 4 9. 6 10. 16

Home Link 4-2

1. Answers vary. 2. 6:30
3. 9:40 4. 1:25 5. 2:15



10. 12 11. 8 12. 7 13. 13

Home Link 4-3

1. Answers vary.
2. 9 3. 7 4. 2 5. 9

Home Link 4-4

1. a. 374 b. 507 2. 740
3. 936 4. 8; 0; 6 5. 2; 3; 5

Home Link 4-5

Answers vary for the rounds of *Number Top-It*.

1. 14 2. 16 3. 8 4. 7

Home Link 4-6

1. 145 2. 328 || ■ ■ ■

Home Link 4-7

1. 32; 17; 49

Sample answer:



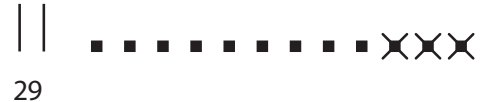
2. 26; 34; 60

Sample answer:



3. 32

Sample answer:



Home Link 4-8

Answers vary.

Home Link 4-9

1. Answers vary.
2. 14 3. 6 4. 13 5. 13

Home Link 4-10

1. Answers vary.
2. 8 3. 5 4. 9 5. 15

Home Link 4-11

12 cm; 6 cm; 8 cm; 26 cm