

Introducing Length Measurement

Home Link 4-1

NAME _____

DATE _____

Family Note

Today your child began exploring length. Children directly compared the lengths of two objects. Then they compared the lengths of two objects indirectly by using a third object, such as a strip of paper or a piece of string. Ask your child to explain how to use a strip of paper to compare length.

Please return this Home Link to school tomorrow.

- ① List 3 things at home that are *longer* than the string.

- ② List 3 things at home that are *shorter* than the string.

- ③ Is anything you listed for Problem 1 shorter than anything you listed for Problem 2? Explain.



Practice

- ④ Draw the missing dots. Fill in the sentence.

_____ + 8 = 17



Measuring Length

Home Link 4-2

NAME _____

DATE _____

Family Note

Today your child learned that length is measured with same-size units placed end to end without gaps or overlaps. As your child completes the Home Link, check that the units are placed end to end without gaps or overlaps.

Please return this Home Link to school tomorrow.

Find at least 5 of the same item. They must be the same size. For example, you might choose paper clips, blocks, or toothpicks. This will be your length unit.

- ① I chose _____ for my length unit.
- ② Draw a line that is about 1 _____ long.
- ③ Draw a line that is about 3 _____ long.
- ④ Draw a line that is about 5 _____ long.

Practice

- ⑤ Count up to solve.

What number is 12 more than 43? _____

More Length Measurement

Home Link 4-3

NAME _____

DATE _____

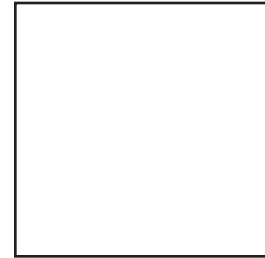
Family Note

In the last lesson, your child measured objects by lining up same-size units (such as toothpicks) end to end. Today, children explored ways to measure objects using only one unit, such as an unsharpened pencil. They practiced moving the pencil along the length of an object, avoiding gaps and overlaps, and counting the number of pencils to determine the length.

Please return this Home Link to school tomorrow.

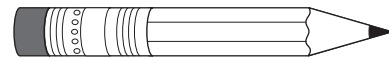
- ① Trace the outline of your thumb in the box.

This is a _____ thumb
length unit. your name



- ② About how many thumbs long is this pencil?

About _____ thumbs



- ③ About how many thumbs long is this string?

About _____ thumbs



Practice

Count up to solve.

- ④ What number is 6 more than 7? _____

- ⑤ What number is 5 more than 9? _____

- ⑥ What number is 8 more than 4? _____

- ⑦ What number is 7 more than 9? _____

Measuring with Spoons

Home Link 4-4

NAME _____

DATE _____

Family Note

Today your child discussed how to make a good measurement using nonstandard units, such as blocks. Children learned that they should line up identical units without gaps or overlaps.

Help your child line up same-size spoons end to end as you complete this Home Link.

Please return this Home Link to school tomorrow.

Use spoons to find the length of each object.

- ① Your bed About _____ spoons long
- ② Your pillow About _____ spoons long
- ③ A sofa or chair About _____ spoons long

Draw or write how you used the spoons to measure.

Practice

- ④ Ming has 5 limes and 7 oranges.

How many pieces of fruit does Ming have?

_____ pieces of fruit

Number model: _____

Building Shapes from Shapes

Home Link 4-5

NAME _____

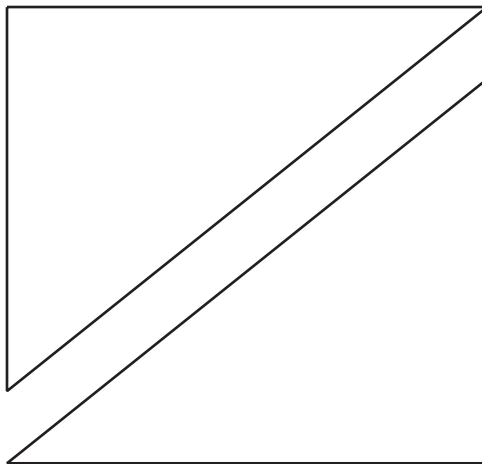
DATE _____

Family Note

Today your child learned that good questions for collecting data have more than one possible answer. Children also created shapes with given numbers of sides or corners. And they combined 2- and 3-dimensional shapes to make new shapes.

Please return this Home Link to school tomorrow.

- ① Trace these triangles onto another paper.
Cut them out from that paper.
Combine them to make four different shapes.
Draw all four shapes you made on the back
of this paper.



Practice

- ② Shana has 3 green marbles and 4 red marbles.
How many marbles does Shana have in all?

_____ marbles

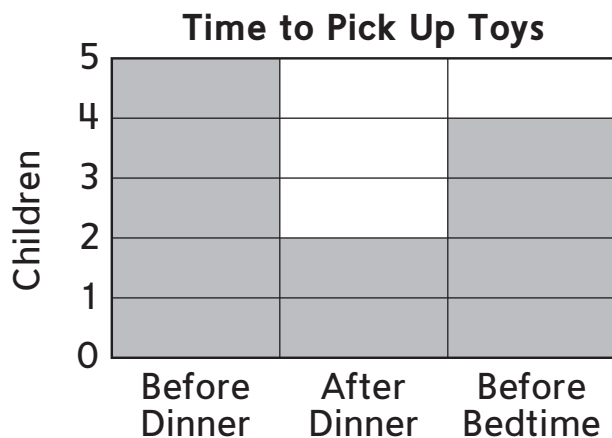
Number model: _____

Representing Data with a Bar Graph

Family Note

In previous lessons, children organized data in tally charts. Today your child learned how to use a bar graph to organize and interpret data.

Please return this Home Link to school tomorrow.



Answer the questions about the bar graph.

- ① How many children pick up toys before dinner?
_____ children
- ② How many children pick up toys before bedtime?
_____ children
- ③ Did more children pick up toys after dinner or before bedtime? _____
How many more children? _____ more children

Practice

④ **Rule**
+2

9					
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Introducing Doubles

Home Link 4-7

NAME

DATE

Family Note

Today your child was introduced to doubles such as $1 + 1 = 2$, $2 + 2 = 4$, $3 + 3 = 6$, and so on. Doubles are often some of the first addition facts that children master.

Please return this Home Link to school tomorrow.

Play *Roll and Record Doubles* with someone at home.

Directions

- ① Roll a dot die. Use that number to make a double.
- ② Shade the first empty box above the sum for the double.
- ③ Take turns until one column is filled.

2	4	6	8	10	12

Practice

- ④ Draw dots on the domino.

Write a number sentence for the domino.



Addition and Subtraction Facts in *First Grade Everyday Mathematics*

In Unit 4, children are formally introduced to addition facts, defined as two numbers from 0 to 10 and their sums, such as $9 + 7 = 16$. Subtraction problems using the same numbers, such as $16 - 7 = 9$ and $16 - 9 = 7$, are known as subtraction facts, which will be formally introduced later in first grade. Learning addition and subtraction facts is a major focus of first grade mathematics. Future work with addition and subtraction builds on these basic facts, and many strategies children develop for solving their basic facts can later transfer to computation with larger numbers. *Everyday Mathematics* supports children's progress toward fluency with addition and subtraction facts by encouraging children to do the following:

- Put numbers together and take them apart flexibly, for example, by seeing that 8 is the same as $6 + 2$, $4 + 4$, $3 + 5$, and so on.
- Discover and compare efficient strategies for solving basic facts.
- Practice basic facts in meaningful ways, through number stories, Quick Looks with ten frames, and games.

Knowing doubles ($2 + 2$, $3 + 3$, $4 + 4$, and so on) and combinations of 10 ($1 + 9$, $2 + 8$, $3 + 7$, and so on) can help children solve nearly all other addition or subtraction facts. For this reason, these two groups of facts are a major focus in *First Grade Everyday Mathematics*. In Units 6 and 7, children learn strategies for solving more difficult facts.

As your child solves basic fact problems or plays fact games at home, you may wish to support his or her development of fact fluency by asking questions, such as these:

- How did you figure it out?
- Can you say aloud how you thought about it in your head?
- Is there another way you could figure it out?
- If someone did not know the answer, how would you explain to that person how to figure it out?

Discussion and practice with good fact strategies in first grade will lead to eventual mastery of all basic facts.

Combinations of 10

Home Link 4-8

NAME _____

DATE _____

Family Note

Earlier in the year, your child explored pairs of numbers that add to 10. Recognizing these pairs of numbers helps with mastering many addition facts. Today your child worked with these number pairs again and categorized them formally as a group of facts known as *combinations of 10*.

Please return this Home Link to school tomorrow.

① Do Two-Fisted Penny Addition with someone at home:

- Make a pile of 10 pennies.
- The person at home grabs some pennies with one hand and keeps that hand closed.
- Count the pennies left in the pile and decide how many pennies are in the closed hand.
- Fill in the table. Record more on the back of this sheet.

Number of Pennies in the Pile	Number of Pennies in the Closed Hand	Number Model
8	2	$8 + 2 = 10$

Practice

② How many pennies? Remember to include a unit.



More Combinations of 10

Home Link 4-9

NAME

DATE

Family Note

Your child spent more time today working with combinations of 10. Continue working with your child to help him or her recognize combinations of 10.

Please return this Home Link to school tomorrow.

Do this activity with someone at home.

- ① Someone at home says a number between 0 and 10.
- ② You say the number that makes a combination of 10.
- ③ Then say the addition fact and record the number sentence in the space below.
- ④ Repeat at least 6 more times.

Practice

- ⑤ A fish tank has 9 goldfish and 8 rainbow fish.

How many fish are in the tank? _____ fish

Write a number model.

Number model: _____

Adding Three Numbers

Family Note

Today your child learned about adding three numbers. Children learned that when more than two numbers are added, it does not matter which pair of numbers is added first.

Please return this Home Link to school tomorrow.

Solve. Then answer the questions.

$$4 + 2 + 8 = \underline{\quad}$$

- ① Which numbers did you add first? _____
- ② Why did you add these first?

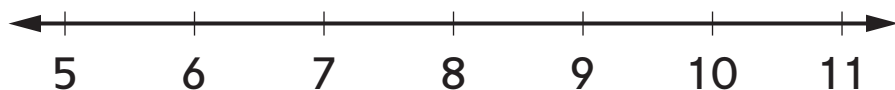
$$3 + 7 + 7 = \underline{\quad}$$

- ③ Which numbers did you add first? _____
- ④ Why did you add these first?

- ⑤ What other way could you add them?

Practice

- ⑥ Solve.



Start at 7. Count up 4 hops. Where do you land? _____

Start at 5. Count up 5 hops. Where do you land? _____

10 More, 10 Less

Home Link 4-11

NAME _____

DATE _____

Family Note

Today your child began exploring ways to find 10 more or 10 less using a number grid. By the end of the year, children should be able to find 10 more or 10 less than a number in their heads. They will continue to practice throughout the year.

Please return this Home Link to school tomorrow.

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
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Solve.

- ① What number is 10 more than 23? _____
- ② What number is 10 less than 23? _____
- ③ What number is 10 more than 38? _____
- ④ What number is 10 less than 38? _____

Practice

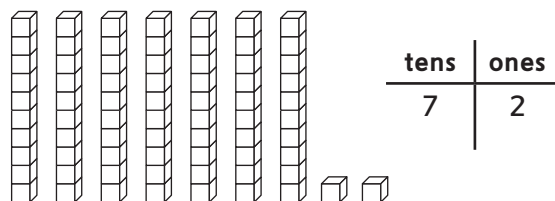
- ⑤ April has 8 crayons.
José has 4 crayons.
How many crayons do April and José have in all?
Write a number model.

_____ crayons

Number model: _____

Place Value and Comparisons

In Unit 5, children begin to use larger numbers and explore place value. They learn that the digits in a 2-digit number represent the number of tens and ones. For example, in the number 72, 7 is in the tens place and has a value of 7 tens, or 70; 2 is in the ones place and has a value of 2 ones, or 2. Children use base-10 blocks to represent numbers and to demonstrate their understanding of place value by exchanging 10 ones for 1 ten, and vice versa.



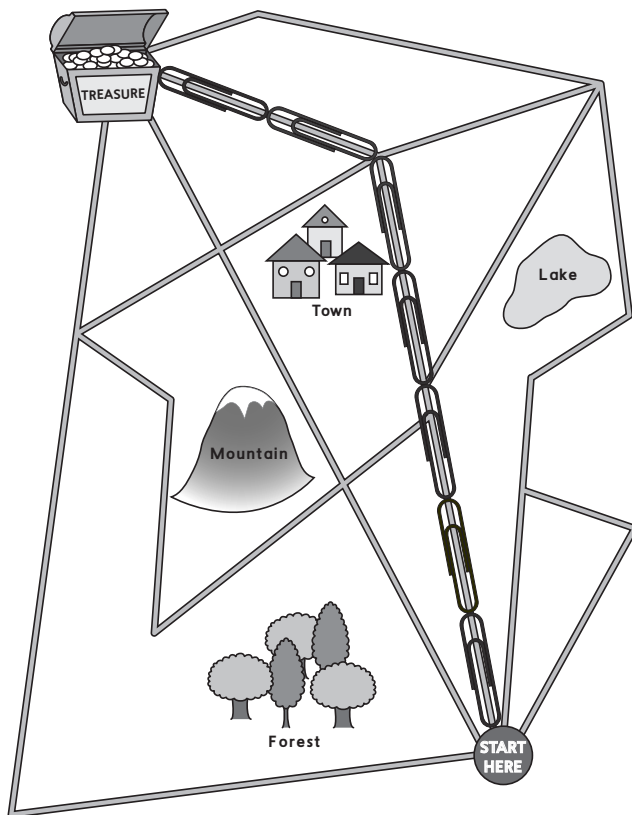
Children compare numbers using the symbols $<$, $>$, and $=$. They discuss what the equal sign ($=$) means and how to use it. They determine whether number sentences are true or false.

These number sentences are true:	These number sentences are not true; they are false:
$2 + 9 = 9 + 2$	$4 + 5 = 3 + 7$
$4 + 7 = 15 - 4$	$9 - 8 = 1 + 1$
$3 + 3 = 1 + 5$	$13 - 4 = 10 - 9$
$10 = 10$	$7 = 12 - 8$

Children go from comparing numbers with $<$ and $>$ to modeling comparison number stories. In comparison stories, they decide which of two quantities is larger and then find the difference. Children use situation diagrams to help make sense of these problems.

Unit 5: Family Letter, *continued*

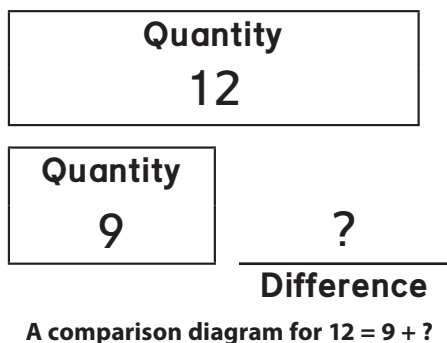
Children also spend more time on measurement. They measure different sections of a crooked path and add the lengths to find the total length of the path.



Please keep this Family Letter for reference as your child works through Unit 5.

Vocabulary Important terms in Unit 5:

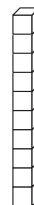
comparison diagram A diagram used in *Everyday Mathematics* to model situations in which two quantities are compared. The diagram contains two quantities and their difference.



cube In *Everyday Mathematics*, a base-10 block that represents 1.



long In *Everyday Mathematics*, a base-10 block that represents 10.



number scroll A series of number grids taped together.

Do-Anytime Activities

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

1. Look for 2-digit numbers in and around your home. Ask your child to tell you how much each digit is worth. Ask your child to compare 2-digit numbers using $<$, $>$, and $=$.
2. Tell addition and subtraction number stories using 1- and 2-digit numbers of household objects. Then work together to solve them and write number models. Discuss strategies.
3. Ask your child to order a group of items in your home from shortest to longest.

Building Skills through Games

In Unit 5, your child will play these and other games to develop skills with addition, place value, and comparing numbers:

Addition Top-It

In this *Top-It* variation, each player turns over and adds two cards. The higher sum wins the round.

Base-10 Exchange

Players take turns putting base-10 blocks on their Tens-and-Ones Mat according to the roll of a die. Whenever possible, they exchange 10 cubes for 1 long. The first player to get 10 longs wins.

The Difference Game

Players each pick a card and collect as many pennies as the number shown on the card. Then players count each other's pennies and figure out how many more pennies one player has than the other.

The Digit Game

Each partner draws two cards from a deck of number cards. The player whose cards make the larger 2-digit number takes all of the cards drawn. The player with more cards at the end of the game wins.

Stop and Go

There is a GO player and a STOP player. The GO player tries to *go* to 50, adding 1- and 2-digit numbers. The STOP player tries to *stop* the GO player by subtracting 10 and 20 from 2-digit numbers.

Top-It with Relation Symbols

In this *Top-It* variation, children compare their cards using $<$, $>$, and $=$ cards.



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 the Home Links for this unit.

Home Link 5-1

1. 56 2. 40 3. 12 4. Answers vary.

Home Link 5-2

1. Sample answer: 61, 62, 63, 64, 65
 2. Sample answer: 48, 18, 28, 78, 68
 3. 8; $4 + 4 = 8$

Home Link 5-3

1. 1Ⓓ and 0Ⓔ; 10
 2. 1Ⓓ and 2Ⓔ; 12
 3. Sample answer: 2Ⓓ and 1Ⓔ; 21
 4. Answers vary.

Home Link 5-4

1. $>$; $<$; $=$; $<$; $>$; $<$
 2. 17; $8 + 9 = 17$

Home Link 5-5

1. False; True; True; True; False; True; False
 2. ③1; ⑨4; ①7

Home Link 5-6

- 1–2. Answers vary.

3.

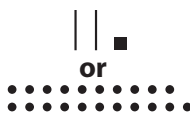
									100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130

4. 6; 7; 6

Home Link 5-7

1. Answers vary.
 2. 63 3. 19 4. 72

Home Link 5-8

1. 
 2. Answers vary.

Home Link 5-9

1. $>$; $>$; $<$; $=$; $<$; $=$; $<$; $>$
 2. 9; $3 + 2 + 4 = 9$

Home Link 5-10

1. Bart; 4; Sample number model: $12 - 8 = 4$
 2. Martha; 7; Sample number model: $3 + 7 = 10$
 3. Answers vary.

Home Link 5-11

1. 40; $60 - 20 = 40$
 2. 85; $54 + 31 = 85$
 3. 70; $56 + 14 = 70$
 4. False

Home Link 5-12

Sample answers given for problems 1–6.

1. Hammer 2. Scissors 3. Computer
 4. Number line 5. Counters 6. Coins
 7. 4; 6; 9