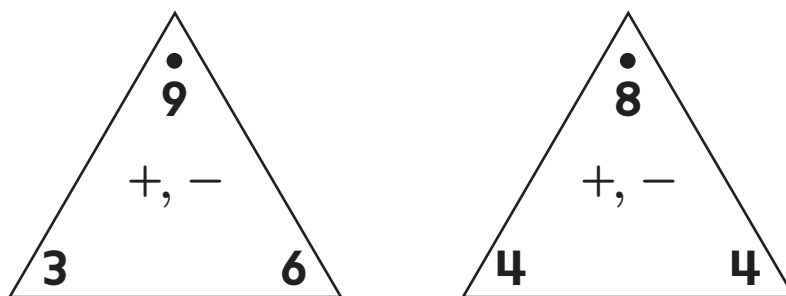


Subtraction Fact Strategies and Attributes of Shapes

In Unit 7, children continue to work on addition and subtraction fact fluency. They begin by looking at fact families, which show related addition and subtraction facts. Children practice facts with Fact Triangles and through games. They also explore and compare strategies for subtracting. They solve “What’s My Rule?” problems that require adding and subtracting to complete number patterns.



Fact Triangles for 3, 6, 9, and 4, 4, 8

Also in this unit, children explore attributes of shapes and determine which attributes define shapes. For example, a square can be blue, red, or green and still be a square. Therefore, color is a *nondefining attribute* for a square. However, a shape is not a square unless it has 4 equal sides. So, having 4 equal sides is a *defining attribute* of a square.

Finally, children connect times shown on digital clocks with those on analog clocks. They examine how the minute hand moves as an hour passes. In this unit, children continue to tell time to the nearest hour on an analog clock (using hour and minute hands) and on a digital clock. In Unit 8, they will start telling time to the half hour.

Please keep this Family Letter for reference as your child works through Unit 7.

Vocabulary Important terms in Unit 7:

attribute A feature of an object or common feature of a set of objects. Examples of attributes include size, shape, color, and number of sides.

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

fact family A set of related arithmetic facts involving the same numbers. *For example:*

$$3 + 4 = 7$$

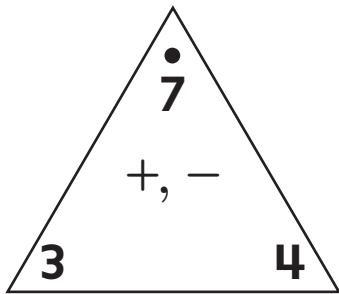
$$4 + 3 = 7$$

$$7 - 3 = 4$$

$$7 - 4 = 3$$

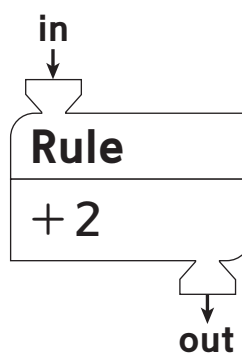


Fact Triangle In *Everyday Mathematics*, a triangular flash card labeled with the numbers of a fact family that children can use to practice addition/subtraction facts. The addends and their sum appear in the corners of each triangle.



think addition A strategy for solving subtraction facts that involves thinking of a known addition fact. For example, to solve $14 - 7 = \underline{\quad}$, children might think of $7 + 7 = 14$.

“What’s My Rule?” A problem involving inputs, outputs, and a rule. Two of the three are known, and the third can be found out.



in	out
5	7
7	9
2	4

Do-anytime Activities

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

1. Use the Fact Triangles that children will begin receiving in Lesson 7-2 to help your child practice addition and subtraction facts.
2. Look for shapes around the house, at the supermarket, in architectural features, and on street signs. Name these shapes using their geometric names, and have children share defining attributes of the shapes.
3. Draw a name-collection box with a number on the tag. Ask your child to write at least 10 addition and subtraction names for the given number.

12

$$17 - 5$$

$$2 + 10$$

$$4 + 8$$

$$13 - 1$$

twelve

doce

|||| ||| ||

Building Skills through Games

Your child will play these games and others in Unit 7:

Attribute Train

One player chooses a block to start a sequence, like cars of a train. Players alternate adding a block that differs by only one attribute—shape, thickness, size, or color—from the previous block.

Beat the Calculator

A “Calculator” (a player who uses a calculator) and a “Brain” (a player who does not use a calculator) race to see who will be first to solve addition problems.

Salute!

Without looking at their cards, two players each hold a number card, ranging from 0 to 10, to their foreheads with the number facing out. A third player announces the sum of the two numbers. The first player with a number card to name the number on his or her forehead (without looking) wins the round.

Tric-Trac

Players take turns rolling dice and covering equivalent sums on the gameboard.

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 7-1

1. 7, 5, 12

$$12 - 7 = 5$$

$$12 - 5 = 7$$

$$7 + 5 = 12$$

$$5 + 7 = 12$$

2. 6, 9, 15

$$15 - 6 = 9$$

$$15 - 9 = 6$$

$$6 + 9 = 15$$

$$9 + 6 = 15$$

3. Answers vary.

Home Link 7-3

Sample number models given for Problems 1-4.

1. 3; $3 + \underline{\quad} = 6$

2. 3; $7 + \underline{\quad} = 10$

3. 6; $12 = 6 + \underline{\quad}$

4. 9; $1 + \underline{\quad} = 10$

5. Answers vary.

Home Link 7-4

1. 5, 8, 13

$$5 + 8 = 13$$

$$8 + 5 = 13$$

$$13 - 5 = 8$$

$$13 - 8 = 5$$

2. Sample answers: $10 + 4$; $7 + 7$; $15 - 1$

- 3.

20	
///	$5 + \cancel{5} + 5$
$2 + \cancel{10}$	$24 - 4$
$20 + 0$	$10 + 10$

4. ~~40~~; ~~92~~; ~~39~~

Home Link 7-5

1. Sample answers: 6 sides, 6 angles, white color
2. Sample answers: 4 sides, the top and bottom are the same length, gray color
3. 12; 9

Home Link 7-6

- 1–3. Answers vary.
4. 53

Home Link 7-7

1. Answers vary.
2. Sample answers: color, size, which ways they point
3. Sample answers: 3 sides, all sides are straight, 3 vertices, closed
4. 7; 7; 18

Home Link 7-8

1. + 1; 20; 10
2. – 2; 10; 9
3. – 7; 5; 4
4. 4
5. 4
6. 7

Home Link 7-9

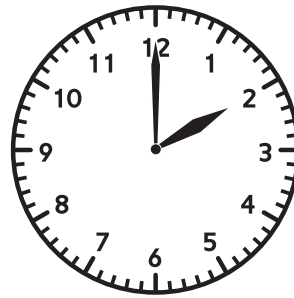
1. + 1
2. – 4
3. + 6
4. – 5
5. 9 hops; $19 - 9 = 10$

Home Link 7-10

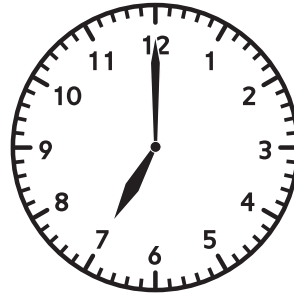
1. 14; 6; 7; 10
2. 13; 6; 15; 10
3. 50

Home Link 7-11

1. 3:00
2. 11:00
- 3.



4.



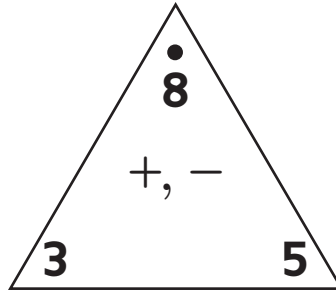
5. <; >; =



Fact Triangles

This Family Letter includes several pages of Fact Triangles. Each Fact Triangle includes three numbers that make up a fact family. Have your child cut out each Fact Triangle. Use these triangles like flash cards to practice addition and subtraction facts.

The number below the dot is the sum of the other two numbers. For example, 8 is the sum of 5 and 3.



You can help your child practice addition by covering the sum. Your child then adds the numbers that are not covered. For example, if you cover 8, your child adds 5 and 3 to find the sum, 8.

By covering one of the numbers at the bottom of the triangle, your child can practice subtracting the two uncovered numbers on the triangle from their sum. For example, if you cover 3, your child subtracts

5 from 8. If you cover 5, your child subtracts 3 from 8.

Covering one of the numbers at the bottom of the triangle can also be used to practice finding missing addends. For example, if you cover 3, your child determines the number that is added to 5 to get 8. In other words, $5 + \square = 8$.

Fact Triangles have two advantages over regular flash cards:

1. They reinforce the link between addition and subtraction.
2. They help simplify memorization by linking four facts together. Knowing a single fact means you know four facts.

$$5 + 3 = 8$$

$$3 + 5 = 8$$

$$8 - 5 = 3$$

$$8 - 3 = 5$$

Save the Fact Triangles in an envelope or a plastic bag, and use them to continue practicing addition and subtraction facts with your child when you have time.

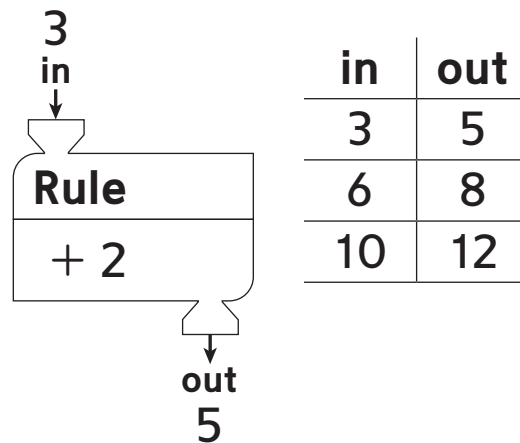
“What’s My Rule?”

Today your child learned about a kind of problem you may not have seen before. We call it “What’s My Rule?” Please ask your child to explain it to you. Here is a little background information you might find useful.

Imagine a machine that has a funnel at the top and a tube at the bottom—we call this a *function machine*. The function machine can be programmed so that when you drop a number into the funnel at the top, the machine changes the number according to the rule and a new number comes out of the tube at the bottom.

For example, you can program the machine to add 2 to any number that is dropped into the funnel. If you put in 3, out comes 5; if you put in 6, out comes 8.

You can show this with a table:



Here is another example of a function machine:

