Student Guide

In Twos, Threes, and More (SG pp. 55-56) Questions 1-9

- 1.* 12 hands. Possible responses: count them; skip count by threes; multiply $4 \times 3 = 12$ hands
- **2.** A. 24 tennis balls; $8 \times 3 = 24$; skip count by threes
 - **B.** 22 eyes; $11 \times 2 = 22$; skip count by twos
 - C. 20 legs; $5 \times 4 = 20$; skip count by fours
 - **D.** 18 teacups; 6 + 6 + 6 = 18; $3 \times 6 = 18$; skip count by threes
 - **E.** 16 wheels; $8 \times 2 = 16$; skip count by twos
- **3. A.** 15 tennis balls
 - **B.** $5 \times 3 = 15$
- **4.** 12 people; $2 \times 6 = 12$
- **5.*** 16 legs, $4 \times 4 = 16$ or 20 4 = 16
- **6. A.** $4+4=2\times 4$
 - **B.*** $5 + 5 + 5 = \boxed{3} \times 5$
 - **C.** $2 + 2 + 2 + 2 + 2 = \boxed{5} \times 2$
 - **D.** $2 + 2 + 2 + 2 = 4 \times \boxed{2}$
 - **E.** $6 + 6 = 2 \times 6$
 - **F.** $9 + 9 + 9 + 9 = \boxed{4} \times 9$
- **7. A.** True
 - **B.*** False: $4 \times 3 = 3 + 3 + 3 + 3$ or $3 \times 3 = 3 + 3 + 3$
 - C. True

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- **8.** 8 hands; $2 \times 3 = 6$ hands on two watches and 2 more hands on the third watch; 8 hands in all
- **9.** Possible response: I do not agree with Shannon's solutions. She might have read the problem wrong because her solution shows three watches with 2 hands each. There is only one watch with two hands and two watches with three hands. A better number sentence would be 3 + 3 + 2 = 8 hands.

Mrs. Brown divided her class into groups for a project. There were 9 groups















You can use addition to show the number of children in all the groups: 2+2+2+2+2+2+2+2+2

To show this, we had to write 2 nine times. A shorter way to write the number of children in all the groups is with **multiplication**: 9×2

We read this "9 times 2." This is the number of things in 9 groups of 2 things. After we figure out what the answer is by counting, adding, skip counting, or some other way, we can show it with a number sentence:

 $9 \times 2 = 18$

Use the picture of the toy store to answer the following questions.

- 1. There are four clocks in the picture. Each clock has three hands. How many hands are on the clocks altogether? How did you find out?
- 2. The clock hands come in four groups of three hands. Other items in the picture also come in groups. Some of them are listed below. How many of each item are there altogether? Show or tell how you know.
- A. Tennis balls in packages
- B. Eyes on dolls
- C. Legs on horses
- D. Teacups in tea sets
- E. Wheels on motorcycles
- 3. Tina the Tennis Pro bought five packages of tennis balls.
 - A. How many tennis balls did she buy altogether?
 - B. Write a multiplication sentence that shows your answer.
- 4. Mary received two Tea Time sets for her birthday. Including Mary, how many people can attend her tea party? Show or tell how you know.
- 5. Alex bought one of the horses. How many legs are on the horses in the store now? Show or tell how you know

In Twos, Threes, and More

SG · Grade 3 · Unit 3 · Lesson 2 55

Student Guide - Page 55

Using Symbols

6. Fill in the boxes to make the following sentences true:

A.	4 +	4 =	× 4

C.	2	+	2	+	2	+	2	+	2	=	×
F.	Г		٦.	+ 1	6 =	= 2	· ×	6			

- 7. Tell whether the number sentences are true or false. If they are false rewrite them so they are true.
- **A.** $3 \times 4 = 4 + 4 + 4$
- **B.** $4 \times 3 = 3 + 3 + 3$
- **C.** $3 \times 4 = 2 + 2 + 2 + 2 + 2 + 2$

✓ Check-In: Questions 8-9

- 8. Shelly's family has three watches. One watch has two hands. Each of the other two watches has three hands. How many hands are on the watches altogether? Show or tell how you got your answer.
- 9. Shannon solved Question 8 this way

2 + 2 + 2 = 6 watch hands

lists of things. These lists will be used to write multiplication problems.

Do you agree with Shannon's solution?

If so, show or tell how you know she is correct. If not, show or tell how you can help Shannon.

Use the In Twos Through Twelves pages in the Student Activity Book to write

56 SG · Grade 3 · Unit 3 · Lesson 2

Student Guide - Page 56

^{*}Answers and/or discussion are included in the lesson.

Student Guide - Page 57

Student Guide

In Twos, Threes, and More (SG p. 57) Homework

Questions 1-7

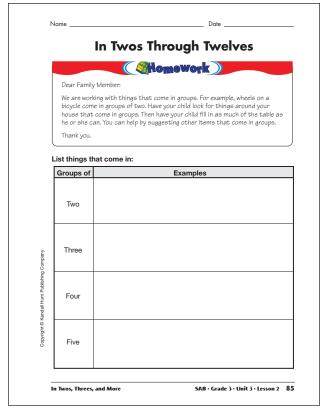
- **I. A.** Answers will vary; we use 5 family members as an example.
 - **B.** 50 toes, counting by ten, multiply
 - **C.** $5 \times 10 = 50$ toes
- 2. A. Answers will vary; 5 chairs
 - **B.** 20 legs, skip count by fours, multiply
 - **C.** $5 \times 4 = 20 \text{ legs}$
- **3. A.** 16 eyes
- **B.** $8 \times 2 = 16$
- **4. A.** 24 juice boxes
- **B.** $4 \times 6 = 24$
- **5. A.** 24 buns
- **B.** $3 \times 8 = 24 \text{ buns}$
- **6. A.** 28 days
- **B.** $4 \times 7 = 28 \text{ days}$
- 7. A. Answers will vary. B. Answers will vary.

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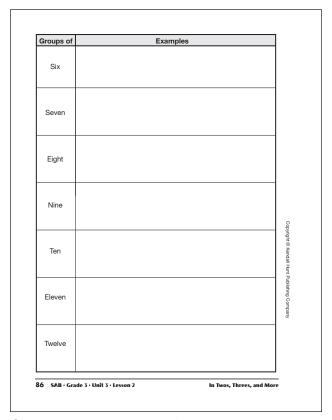
Student Activity Book

In Twos Through Twelves (SAB pp. 85-86)

*See Figure 1 in Lesson 2 for a sample list.



Student Activity Book - Page 85



Student Activity Book - Page 86

^{*}Answers and/or discussion are included in the lesson.

Student Activity Book - Page 87

Name	Date
2.	Think of something that comes in groups of a number other than 8. You can use something from your list <i>In Twos Through Twelves</i> or think of something different.
	A. Draw several groups of the thing you have chosen.
	B. Write a multiplication story that matches your picture.
	C. Write a multiplication sentence to show your thinking.
3.	Fill in the boxes to make the following sentences true:
٥.	A. 10 + 10 + 10 = ×10 B. 6 + 6 + 6 + 6 + 6 = 5 ×
	C. + 8 = 2 × 8
	B.7 + 7 + 7 \ 7
88	SAB · Grade 3 · Unit 3 · Lesson 2 In Twos, Three, and More

Student Activity Book - Page 88

Student Activity Book

Using Multiplication to Count Things in Groups (SAB pp. 87-88) Questions 1-3

- 1. 40 legs; $5 \times 8 = 40$ legs, or 8 + 8 + 8 + 8 + 8 = 40 legs
- **2.** Answers will vary.
- **3. A.** $10 + 10 + 10 + 10 = \boxed{4} \times 10$

B.
$$6 + 6 + 6 + 6 + 6 = 5 \times \boxed{6}$$

C.
$$8 + 8 = 2 \times 8$$

D.
$$7 + 7 + 7 = \boxed{3} \times 7$$