Lesson 6

Lesson Preparation

- Check yesterday's pretest and mark the appropriate checklist boxes on page 18.
- *F AND L FLASH CARDS*

Drill

- Count forward and backward by 4's to 40.
- Do *F AND L FLASH CARDS*.
- Do Speed Drill 6 and record scores.

Working in the LightUnit

Practice Set – Geometry (for students who didn't pass yesterday's pretest).

Tips for Struggling Students

➔ Draw a ray, a line segment, and a line. Explain the differences.

➔ Point out that in art class a line can be straight

—— Speed Drill 6 —— Number correct in 1 minute: ☐

10	10	1	0	10	1	2	0	1
× 4	× 10	× 1	× 2	× 3	× 7	× 9	× 8	× 10
40	100	1	0	30	7	18	0	10
1	2	0	2	1	10	10	1	10
× 2	× 2	× 1	× 4	× 3	× 6	× 8	× 6	× 9
2	4	0	8	3	60	80	6	90
2	10	1	2	2	2	1	0	2
× 7	× 1	× 0	× 3	× 0	× 5	× 8	× 6	× 10
14	10	0	6	0	10	8	0	20
10	2	0	10	10	2	10	2	1
× 7	× 1	× 3	× 2	× 5	× 8	× 0	× 6	× 5
70	2	0	20	50	16	0	12	5

67

6

- ☐ Count forward and backward by 4's to 40.
- ☐ Practice your F and L flash cards for 5 minutes.
- ☐ Do Speed Drill 6 on page 67.
- ☐ Record your score in the graph on page 64.

☐ **I passed the pretest in Lesson 5.**
Now I will do the pretest on pages 20, 21.
I may also do *Extra Activity Sheet* (1, 2, 3, 4, 5, 6, 7).

☐ **I did not pass the pretest in Lesson 5.**
I will do all of Lesson 6.

Practice Set – Geometry

Draw lines to match.

1. ray
2. point
3. line
4. line segment

Circle the polygons.

5.

Draw a line segment with your ruler.

6.

Draw a line with your ruler. Lengths will vary.

7.

18

Lesson 6

Follow the directions.

8. Circle the pencils that make angles. Mark the corner of the right angle with a little box.

Write the letter of the polygon beside the name of its shape.

9. triangle __E__
10. octagon __F__
11. hexagon __D__
12. square __A__
13. rectangle __C__
14. pentagon __B__

A   C   E   B   D   F

Write the correct name on the blank.

15. Name the line. __CD__ or DC   R ———— S

16. Name the line segment. __RS__ or SR   C ———— D

17. Write the name of the triangle.
__BCF__
Letters may be in any order.

C   E   G   B   D   F

19

11

or curvy, but in math the term *line* always means a straight line with two arrows. It goes on forever in both directions.

➔ Review the six basic polygons. A polygon is a closed figure that has only straight sides.

➔ Explain what an angle is (two rays that begin at the same corner). Show students how to mark a right angle with a little box in the corner.

➔ Explain how we name a geometrical figure by listing the points in some consecutive order. When naming rays, we must always begin at the endpoint. Lines and segments may be named in either order of the two points, however. To name polygons we may begin anywhere and list the points in either direction. Because of this, all figures except rays may have more than one correct name.

Pretest – Logic & Story Problems (for all students). Students must have a raw score of **13** or more to pass.

Helpful Hints

➔ For a fun activity in naming polygons, draw a triangle (or rectangle) and label the points. Challenge the students to list as many names for the figure as they can. Many-sided polygons (pentagons, octagons, etc.) will produce quite a long list of names.

Lesson 7 *pages 21-25*

Lesson Preparation

• Check yesterday's pretest and mark the appropriate checklist boxes on page 21.
• *G AND K FLASH CARDS*
• Rulers with inches and centimeters
• Extra Practice Sheets 11, 12 (as needed)

Lesson 6

Pretest – Logic & Story Problems | 13 / 15 |

Write *true* **or** *false.* (1 point each.) [2]

1. In 216, 1 is in the tens place. ‾‾true‾‾
2. A quarter is equal to 10 cents. ‾‾false‾‾

Which is it? Circle the correct picture. (1 point.) [1]

3. We do not write with it.
   We do not write on it.
   It does not fit on the end of a pencil.

Solve the story problems. Show your work and label your answer.
(1 point each solution, answer, and label.) [12]

4. When school let out last year, Philip was 49 inches tall. When Miss Amy measured him this year he was 51 inches tall. How much taller is he now than he was at the end of last year?

   __2__ ‾‾inches‾‾

   Solution
   $\begin{array}{r} 4\,{}^{4}\llap{5}\llap{}1 \\ -\ 49 \\ \hline 2 \end{array}$

5. The first time Andrew did a speed drill he had 25 facts correct. On the fifth speed drill he had 32 facts correct. How many more facts did he have correct the fifth day than the first day?

   __7__ ‾‾facts‾‾

   Solution
   $\begin{array}{r} {}^{2}\llap{3}2 \\ -\ 25 \\ \hline 7 \end{array}$

20

Lessons 6, 7

6. Three of the students walked to school. Four rode their bikes, and 36 rode the bus. How many students traveled to school each day?

   _43_ ‾‾students‾‾

   Solution
   $\begin{array}{r} {}^{1}3 \\ 4 \\ +\ 36 \\ \hline 43 \end{array}$

7. On the first day of school Miss Amy gave her students 25 questions to answer before recess. Andrew finished 18. How many questions did he have left to finish?

   __7__ ‾‾questions‾‾

   Solution
   $\begin{array}{r} {}^{1}\llap{1}\,{}^{1}\llap{}5 \\ 25 \\ -\ 18 \\ \hline 7 \end{array}$

○ **Ask your teacher to look over this pretest and mark the boxes for Lesson 7 below.**

7
☐ Count forward and backward by 12's to 60.
☐ Practice your G and K flash cards for 5 minutes.
☐ Do Speed Drill 7 on page 68.
☐ Record your score in the graph on page 64.

☐ **I passed the pretest in Lesson 6.**
   Now I will do the pretest on pages 24, 25.
   I may also do *Extra Activity Sheet* (1, 2, 3, 4, 5, 6, 7).

☐ **I did not pass the pretest in Lesson 6.**
   I will do all of Lesson 7.

21

Drill

- Count forward and backward by 12's to 60.
- Do *G AND K FLASH CARDS*.
- Do Speed Drill 7 and record scores.

Working in the LightUnit

Practice Set – Logic & Story Problems (for students who didn't pass yesterday's pretest).

Tips for Struggling Students

➔ Work together through Nos. 1 and 2 on page 22, crossing out pictures as they are disqualified by each clue. The picture left is the correct answer.

➔ Review the steps in solving story problems.

1. Decide what you need to do to the numbers—join (add) or separate (subtract).
2. Neatly set up the problem in the box.
3. Solve.
4. Label the answer.

Pretest – Measures (for all students). Students must have a raw score of **20** or more to pass.

Helpful Hints

➔ Students may enjoy setting up and solving each other's logic problems.

➔ Extra Practice Sheets 11 and 12 provide more story problems and logic problems.

Lesson 7

Practice Set – Logic & Story Problems

Which is it? Circle the correct picture.

1. It is not a LightUnit.
   It is not a Sunday school book.
   We should read it every day.

Circle the answer.

2. How old was Andrew when he started third grade?
   It is an even number. 9 10 (8)
   It is less than 5 + 6.
   It has one digit. 14 12

Write *true* or *false*.

3. Many people use milk on their cereal. true
   Vegetables are better for you than candy. true
   Math is easy for everyone. false
   Everyone likes to read. false
   Obedient children please God. true

Solve the story problems. Show your work and label your answer.

4. The school bus is 45 feet long. Miss Amy's car is 14 feet long. How much longer is the school bus than Miss Amy's car?

   _31_ _feet_

   Solution
   $$\begin{array}{r} 45 \\ -14 \\ \hline 31 \end{array}$$

22

Lesson 7

5. "How many library books did you read during the summer months?" asked Miss Amy.
   "I read 9 books, but some of them weren't very big," said Philip.
   "I read 14," said Lisa.
   "We were getting ready to move," said Andrew, "but I still read 5 books."
   How many books did the three children read?

   _28_ _books_

   Solution
   $$\begin{array}{r} {}^{1}9 \\ 14 \\ +5 \\ \hline 28 \end{array}$$

6. Miss Amy's class had 15 minutes of recess in the morning and 30 minutes in the afternoon. How many more minutes of recess did they have in the afternoon than in the morning?

   _15_ _minutes_

   Solution
   $$\begin{array}{r} {}^{2}\cancel{3}0 \\ -15 \\ \hline 15 \end{array}$$

7. Andrew brought a bag of 24 mints to share with his classmates and his teacher. He gave away 13. How many mints does Andrew have left?

   _11_ _mints_

   Solution
   $$\begin{array}{r} 24 \\ -13 \\ \hline 11 \end{array}$$

8. During summer vacation Andrew and his dad went deep-sea fishing. They caught 27 fish. They gave 9 fish to their neighbor. How many fish did they have left?

   _18_ _fish_

   Solution
   $$\begin{array}{r} {}^{1}2\cancel{7} \\ -9 \\ \hline 18 \end{array}$$

23

———— Speed Drill 7 ———— Number correct in 1 minute: ☐

4 + 0 **4**	5 + 9 **14**	4 + 4 **8**	9 + 7 **16**	8 + 8 **16**	6 + 3 **9**	5 + 2 **7**	6 + 4 **10**	9 + 6 **15**
6 + 5 **11**	6 + 6 **12**	4 + 9 **13**	8 + 2 **10**	0 + 0 **0**	4 + 2 **6**	4 + 7 **11**	5 + 7 **12**	4 + 3 **7**
9 + 9 **18**	9 + 2 **11**	5 + 0 **5**	5 + 4 **9**	8 + 4 **12**	8 + 9 **17**	8 + 7 **15**	8 + 5 **13**	6 + 2 **8**
6 + 9 **15**	5 + 5 **10**	9 + 3 **12**	5 + 6 **11**	4 + 6 **10**	5 + 3 **8**	9 + 5 **14**	8 + 6 **14**	9 + 8 **17**

13

Lesson 7

9. "Andrew, how many hours did it take you to travel to our community?" asked Miss Amy. "Well," said Andrew, "on Monday we drove 4 hours, on Tuesday we drove 10 hours, and on Wednesday we drove 3 hours." How long did it take Andrew and his family to travel to their new home?

___17___ hours

Solution
$$\begin{array}{r} 4 \\ 10 \\ +\ 3 \\ \hline 17 \end{array}$$

◯ **Pretest – Measures**   20⟋22

Write the answers. (1 point each.) [11]

1. 1 meter = __100__ centimeters   1 pint = __2__ cups

   1 yard = __3__ feet   1 quart = __4__ cups

   1 foot = __12__ inches   1 dozen = __12__ things

   1 yard = __36__ inches   1 quart = __2__ pints

   1 gallon = __4__ quarts

   Fahrenheit freezing temperature = __32°__

   Celsius freezing temperature = __0°__

Measure the line segment with centimeters. (1 point.) [1]

2. ●————————   __6__ centimeters

24

Lesson 7

Measure the height of the hinge in inches. (1 point.) [1]

3. __3__ inches

Measure to the half inch. (2 points each.) [4]

4. __2½__ inches ●————————●

5. __5½__ inches ●————————————————●

Follow the directions and circle the correct answer. (1 point.) [1]

6. Hold the meterstick beside a yardstick. Which is longer?   yardstick   (meterstick)

Read the thermometers. Write the Fahrenheit and Celsius temperature.

(1 point each.) [4]
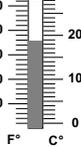
7.   __66__°F
      __19__°C
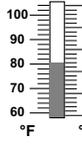
      __27__°C
      __80__°F

◯ **Ask your teacher to look over this pretest and mark page 26.**

25

Lesson 8   *pages 26-29*

Lesson Preparation

- Check yesterday's pretest and mark the appropriate checklist boxes on page 26.
- *J AND ×2 FLASH CARDS*
- Yardstick, meterstick, and rulers for metric and U.S. measures
- Extra Practice Sheets 13, 14 (as needed)

Drill

- Count by 10's from 26 to 126.
- Do *J AND ×2 FLASH CARDS*.
- Do Speed Drill 8 and record scores.

Working in the LightUnit

Practice Set – Measures (for students who didn't pass yesterday's pretest).

——— *Speed Drill 8* ———   Number correct in 1 minute: ☐

3 − 1 **2**	14 − 9 **5**	12 − 4 **8**	8 − 2 **6**	9 − 5 **4**	3 − 0 **3**	13 − 8 **5**	4 − 3 **1**	11 − 2 **9**
13 − 9 **4**	3 − 2 **1**	11 − 7 **4**	8 − 1 **7**	12 − 5 **7**	16 − 8 **8**	7 − 3 **4**	15 − 7 **8**	17 − 9 **8**
12 − 3 **9**	9 − 3 **6**	4 − 4 **0**	14 − 8 **6**	7 − 6 **1**	10 − 6 **4**	13 − 7 **6**	8 − 3 **5**	16 − 7 **9**
15 − 6 **9**	9 − 9 **0**	10 − 7 **3**	12 − 6 **6**	11 − 6 **5**	9 − 2 **7**	8 − 0 **8**	11 − 8 **3**	6 − 5 **1**

68

Tips for Struggling Students

➜ Explain that the United States uses the U.S. measurement system and most other countries use the metric system. Both are taught in Math 300.

➜ Use rulers, a yardstick, and a meterstick to show the relationships of inches/feet/yards and centimeters/meters. Point out that an inch is longer than a centimeter but a meter is longer than a yard.

➜ Show students how to line up the zero mark on a ruler to begin measuring or drawing a line.

➜ Show how to measure in half-inches.

➜ Review common measurement equivalents:

1 ft = 12 in	1 pt = 2 c
1 yd = 36 in	1 qt = 4 c
1 yd = 3 ft	1 qt = 2 pt
1 m = 100 cm	1 gal = 4 qt
1 dozen = 12 things	

➜ Explain that the U.S. unit of temperature is degrees Fahrenheit. The lines on U.S. thermometers count by two-degree intervals.

➜ The metric unit of temperature is degrees Celsius. The lines on Celsius thermometers count by one-degree intervals.

8

☐ Count by 10's from 26 to 126.
☐ Practice your J and ×2 flash cards for 5 minutes.
☐ Do Speed Drill 8 on page 68.
☐ Record your score in the graph on page 64.

☐ **I passed the pretest in Lesson 7.**
Now I will do the pretest on pages 28, 29.
I may also do *Extra Activity Sheet* (1, 2, 3, 4, 5, 6, 7).

☐ **I did not pass the pretest in Lesson 7.**
I will do all of Lesson 8.

Practice Set – Measures

Write the answers.

1. 1 quart = __2__ pints   1 pint = __2__ cups
   1 yard = __3__ feet   1 quart = __4__ cups
   1 foot = __12__ inches   1 gallon = __4__ quarts
   1 dozen = __12__ things   1 yard = __36__ inches
   1 meter = __100__ centimeters
   Celsius freezing temperature = __0°__
   Fahrenheit freezing temperature = __32°__

26

Lesson 8

Read the thermometers. Write the Fahrenheit and Celsius temperature.
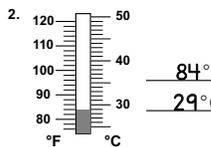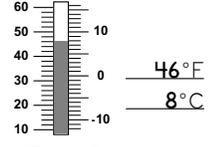
2. __84__°F __29__°C   __46__°F __8__°C

Follow the directions.

△ 3. Measure the width of your classroom with meters.

_____ meters   **Answers will vary.**

4. Measure each line segment with centimeters.

__11__ centimeters
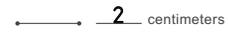
__2__ centimeters

Measure the line segments to the half inch.

5. __$\frac{1}{2}$__ inch

6. __$2\frac{1}{2}$__ inches

School Glue Stick

7. Measure the height in inches. __3__ inches

27

Lesson 8

Pretest – Money

$\frac{15}{17}$

△ **Read the money amounts aloud.** (1 point each.) [4]

1. $5.23 $2.07 $8.00   28¢

Write the money amounts with a dollar sign and decimal point. (1 point each.) [3]

2. four dollars and eighteen cents   __$4.18__

3. twenty-three dollars and seven cents   __$23.07__

4. eighty-six dollars   __$86.00__

Write the cents with a cent sign. (1 point each.) [3]

5. sixteen cents   __16¢__

6. thirty-five cents   __35¢__

7. two cents   __2¢__

Show three ways to make 67¢. (1 point each numbered row.) [3]
Use only coins that are not marked with zero. Other answers are possible.

67¢

	quarters	dimes	nickels	pennies
△ 8.	2	1	0	7
△ 9.	0	6	1	2
△ 10.	2	0	3	2

28

➔ Remind students that water freezes at 0° Celsius, which is the same as 32° Fahrenheit.

➔ Let them practice reading real thermometers.

Pretest – Money (for all students). Students must have a raw score of **15** or more to pass.

Helpful Hints

➔ Many students would benefit from extra practice drawing lines of given lengths. Give them a list of such lines to draw, for example, a 3-inch line, a 4½-inch line and a 7-centimeter line.

➔ Have them measure real objects such as the length of their pencils or the height of their chairs.

➔ Students could take turns reading a classroom thermometer and recording the daily temperatures. Make it a weather and graphing project.

➔ Extra Practice Sheets 13 and 14 provide more work in measuring lines and reading thermometers.

Lesson 9   *pages 29-33*

Lesson Preparation

- Check yesterday's pretest and mark the appropriate checklist boxes on page 29.
- *H AND ×10 FLASH CARDS*
- Real or play money to count dollars, quarters, dimes, nickels, and pennies
- Extra Practice Sheets 15, 16 (as needed)

Drill

- Count by 25's from 25 to 200.
- Do *H AND ×10 FLASH CARDS*
- Do Speed Drill 9 and record scores.

Working in the LightUnit

Practice Set – Money (for students who didn't pass yesterday's pretest).

Tips for Struggling Students

➔ Count money with the students. Show them how to write money using the cent sign or the dollar sign and decimal point. Explain that there must be two places for cents when using the dollar sign—even if they're zeros.

Pretest – Multiplication (for all students). Students must have a raw score of **47** to pass.

Lessons 8, 9

Count the money in each box. Write the amount on the blank. (1 point each.) [4]

11. __$3.26__

13. __$.89__ or 89¢

12. __$1.23__

14. __$8.06__

◯ **Ask your teacher to look over this pretest and mark the boxes in Lesson 9 below.**

9
☐ Count by 25's from 25 to 200.
☐ Practice your H and ×10 flash cards for 5 minutes.
☐ Do Speed Drill 9 on page 69.
☐ Record your score in the graph on page 64.

☐ **I passed the pretest in Lesson 8.**
Now I will do the pretest on pages 32, 33.
I may also do *Extra Activity Sheet* (1, 2, 3, 4, 5, 6, 7).

☐ **I did not pass the pretest in Lesson 8.**
I will do all of Lesson 9.

29

Helpful Hints

➡ For extra practice students could count an amount you've pre-selected and write that amount on a piece of paper. Or set this challenge before them: List all the combinations of coins you could use to make one dollar. Playing store is another favorite way to practice money skills.

➡ Extra Practice Sheets 15 and 16 provide reinforcement in money skills.

—— Speed Drill 9 ——   Number correct in 1 minute: ☐

0 × 2 **0**	10 × 3 **30**	10 × 0 **0**	2 × 3 **6**	1 × 3 **3**	0 × 4 **0**	1 × 7 **7**	10 × 9 **90**	2 × 1 **2**
2 × 5 **10**	10 × 10 **100**	10 × 4 **40**	0 × 0 **0**	10 × 2 **20**	2 × 0 **0**	10 × 8 **80**	0 × 9 **0**	2 × 7 **14**
0 × 10 **0**	2 × 4 **8**	10 × 1 **10**	1 × 9 **9**	2 × 6 **12**	0 × 5 **0**	10 × 6 **60**	1 × 4 **4**	2 × 2 **4**
2 × 10 **20**	0 × 7 **0**	1 × 1 **1**	0 × 1 **0**	2 × 8 **16**	10 × 5 **50**	1 × 6 **6**	10 × 7 **70**	2 × 9 **18**

Lesson 9

Practice Set – Money

△ **Read the money amounts aloud.**

1. $12.50 $7.08 $.09 $25.00 $6.94   78¢

Write the money amounts with a dollar sign and decimal point.

2. seventeen dollars and three cents — **$17.03**
3. ten dollars — **$10.00**
4. fifty-two dollars and eight cents — **$52.08**
5. seven dollars and forty-one cents — **$7.41**
6. three hundred six dollars and four cents — **$306.04**
7. sixty-four cents — **$.64**

Write the cents with a cent sign.

8. thirteen cents — **13¢**
9. nine cents — **9¢**
10. seventeen cents — **17¢**
11. sixty-three cents — **63¢**

Show three ways to make 21¢.
Use only coins that are not marked with zero. Other correct answers are possible.

21¢

	quarters	dimes	nickels	pennies
△ 12.	0	2	0	1
△ 13.	0	0	4	1
△ 14.	0	1	2	1

30

Lesson 9

Show three ways to make 43¢.
Use only coins that are not marked with zero. Answers may vary.

43¢

	quarters	dimes	nickels	pennies
△ 15.	1	1	1	3
△ 16.	1	0	3	3
△ 17.	0	4	0	3

Count the money in each box. Write the amount on the blank.

18. **$2.89**

20. **$6.95**

19. **$1.53**

21. **$4.05**

31

Lesson 9

Pretest – Multiplication

47 / 52

Fill in the blanks. Then write a multiplication sentence.
(1 point each blank; 2 points multiplication sentence.) [8]

1. How many boxes? **4**
   How many crayons in each box? **5**
   How many crayons in all? **20**
   Think: **4** groups of **5** is **20**
   Write: **4 × 5 = 20**

Write the answers. (1 point each.) [4]

2. In 8 × 2 = 16, 16 is called the **product**.
3. In 4 × 3 = 12, the first factor is **4**.
4. In 5 × 8 = 40, the second factor is **8**.
5. Can factors be multiplied in any order? **yes**

Write the products. (1 point each.) [40]

6.

10 × 6 **60**	10 × 1 **10**	10 × 3 **30**	10 × 8 **80**	10 × 5 **50**	10 × 10 **100**	10 × 7 **70**	10 × 4 **40**	10 × 2 **20**	10 × 9 **90**

7.

1 × 5 **5**	1 × 6 **6**	10 × 1 **10**	1 × 1 **1**	7 × 1 **7**	2 × 1 **2**	4 × 1 **4**	1 × 9 **9**	24 × 1 **24**	98 × 1 **98**

32

17

Lesson 10   <div align="right">***pages 33-35***</div>

Lesson Preparation

- Check yesterday's pretest and mark the appropriate checklist boxes on page 33.
- *I AND J FLASH CARDS*
- Pencils or other objects to illustrate multiplication
- Extra Practice Sheet 17 (as needed)

Drill

- Count by odd numbers from 1 to 19.
- Do *I AND J FLASH CARDS*.
- Do Speed Drill 10 and record scores.

Working in the LightUnit

Practice Set – Multiplication (for students who didn't pass yesterday's pretest).

Tips for Struggling Students

➔ Remind students that multiplication is just a quicker way to add the same number many times. For example, 4×3 is just another way of adding 4 three *times.* Because of this we often refer to multiplication as *joining equal groups.* If they have trouble understanding this concept, use groups of objects like pencils to demonstrate multiplication as joining equal groups.

➔ Review the terms and relationship: *factor × factor = product.*

Speed Drill 10 — Number correct in 1 minute: ☐

4 + 1 **5**	8 + 3 **11**	6 + 8 **14**	2 + 6 **8**	7 + 5 **12**	3 + 6 **9**	0 + 1 **1**	3 + 7 **10**	3 + 9 **12**
4 + 8 **12**	5 + 1 **6**	7 + 2 **9**	3 + 5 **8**	2 + 5 **7**	10 + 0 **10**	4 + 5 **9**	1 + 4 **5**	5 + 8 **13**
5 + 7 **12**	2 + 8 **10**	6 + 0 **6**	2 + 9 **11**	8 + 0 **8**	6 + 7 **13**	2 + 4 **6**	9 + 4 **13**	2 + 2 **4**
3 + 4 **7**	3 + 8 **11**	8 + 8 **16**	7 + 0 **7**	7 + 9 **16**	7 + 3 **10**	7 + 8 **15**	3 + 3 **6**	7 + 6 **13**

69

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8.   2 × 9 = **18**   2 × 3 = **6**   2 × 1 = **2**   6 × 2 = **12**   5 × 2 = **10**

9.   2 × 8 = **16**   2 × 2 = **4**   10 × 2 = **20**   4 × 2 = **8**   7 × 2 = **14**

10.

| 0
× 6
0 | 1
× 0
0 | 4
× 0
0 | 0
× 7
0 | 8
× 0
0 | 0
× 2
0 | 0
× 0
0 | 10
× 0
0 | 13
× 0
0 | 59
× 0
0 |

◯ **Ask your teacher to look over this pretest and mark the boxes below.**

10
- ☐ Count by odd numbers from 1 to 19.
- ☐ Practice your I and J flash cards for 5 minutes.
- ☐ Do Speed Drill 10 on page 69.
- ☐ Record your score in the graph on page 64.

☐ **I passed the pretest in Lesson 9.**
Now I will do the pretest on page 35.
I may also do *Extra Activity Sheet* (1, 2, 3, 4, 5, 6, 7).

☐ **I did not pass the pretest in Lesson 9.**
I will do all of Lesson 10.

Practice Set – Multiplication

Match by drawing lines.

1.   6
       × 5 ——— factor
       30 ——— product

33

Lesson 10

Write the answers.

2. In 4 × 10 = 40, 10 is called a **factor** .

3. In 6 × 5 = 30, the first factor is **6** .

4. In 3 × 5 = 15, 15 is called the **product** .

Fill in the blanks and write a multiplication sentence.

Miss Amy has 3 jars with two cocoons in each jar. How many cocoons are in the jars?

5. **3** groups of **2** is **6**

6. **3 × 2 = 6** cocoons

Write the products.

7.

| 1
× 8
8 | 3
× 2
6 | 3
× 1
3 | 10
× 4
40 | 9
× 2
18 | 9
× 1
9 | 6
× 2
12 | 10
× 0
0 | 13
× 0
0 | 59
× 0
0 |

8.   10 × 9 = **90**   8 × 2 = **16**   9 × 10 = **90**   2 × 4 = **8**   7 × 1 = **7**

9.   6 × 1 = **6**   10 × 6 = **60**   2 × 5 = **10**   0 × 5 = **0**   7 × 2 = **14**

10.

| 0
× 8
0 | 0
× 2
0 | 3
× 0
0 | 10
× 0
0 | 9
× 0
0 | 94
× 0
0 | 6
× 0
0 | 46
× 0
0 | 26
× 0
0 | 85
× 0
0 |

11. Any number multiplied by 0 is always **0** .

12.

| 1
× 8
8 | 1
× 2
2 | 3
× 1
3 | 10
× 1
10 | 9
× 1
9 | 16
× 1
16 | 6
× 1
6 | 53
× 1
53 | 21
× 1
21 | 72
× 1
72 |

34

➜ Teach students that factors may be multiplied in any order.

➜ If they struggle with the facts in which zero is a factor, tell them that zero is the same as nothing. No matter how much *nothing* you add together, it's still *nothing.*

Pretest – Numbers (for all students). Students must have a raw score of **17** or more to pass.

Helpful Hints

➜ Students who have completed all the extra activity pages could write two or three simple story problems or logic puzzles to give to each other to solve. They could also draw pictures to accompany their exercises.

➜ Extra Practice Sheet 17 provides more multiplication practice.

Lesson 10

Fill in the blank.

13. When we multiply a number by 1, the product is always the same as the other __factor__ . or number

Find the product. Then change the order of the factors to make a new fact. Answer *yes* **or** *no.*

14. 3 × 10 = __30__   __10 × 3 = 30__

15. Does the product change when you change the order of the factors? __no__

17 / 19

Pretest – Numbers

△ **Read the numbers aloud. (1 point each.) [5]**

1.   420   609   200   61   5,495

Expand the numbers. (2 points each.) [4]

2.   362 = __300 + 60 + 2__   257 = __200 + 50 + 7__

Write the numbers. (1 point each.) [7]

3.   thirty-nine __39__   nine thousand __9,000__

4.   four thousand, five __4,005__   five hundred __500__

5.   two hundred sixty-three __263__   four hundred two __402__

6.   six thousand, forty-one __6,041__

Write the correct digit from the number *683.* **(1 point each.) [3]**

7.   ones place __3__   hundreds place __6__   tens place __8__

○ **Ask your teacher to look over this pretest and mark the boxes on page 36.**

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Lesson 11   *pages 36-38*

Lesson Preparation

- Check yesterday's pretest and mark the appropriate checklist boxes on page 36.
- *M AND ×0 FLASH CARDS*
- Extra Practice Sheets 18, 19 (as needed)

Drill

- Count forward and backward by 3's to 30.
- Do *M AND ×0 FLASH CARDS.*
- Do Speed Drill 11 and record scores.

Speed Drill 11   Number correct in 1 minute: ☐

2 − 1 **1**	11 − 3 **8**	8 − 6 **2**	13 − 5 **8**	5 − 2 **3**	10 − 3 **7**	14 − 6 **8**	13 − 6 **7**	6 − 3 **3**
4 − 2 **2**	18 − 9 **9**	7 − 1 **6**	9 − 7 **2**	11 − 4 **7**	8 − 7 **1**	15 − 8 **7**	10 − 2 **8**	17 − 8 **9**
9 − 4 **5**	7 − 2 **5**	11 − 9 **2**	13 − 4 **9**	2 − 0 **2**	15 − 9 **6**	6 − 4 **2**	12 − 9 **3**	3 − 3 **0**
8 − 5 **3**	8 − 8 **0**	11 − 5 **6**	14 − 5 **9**	7 − 4 **3**	10 − 4 **6**	7 − 0 **7**	12 − 8 **4**	9 − 8 **1**

Working in the LightUnit

Practice Set – Numbers (for students who didn't pass yesterday's pretest).

Tips for Struggling Students

➜ Review names for place values (ones, tens, hundreds, and thousands).

➔ Work through Nos. 4 and 5 on page 36 with students.

➔ Give practice writing numbers from words.

➔ Show students how to expand numbers:

356 = 300 + 50 + 6

Pretest – Patterns (for all students). Students must have a raw score of **29** or more to pass.

Helpful Hints

➔ Students who have completed all of the extra activity pages may write quizzes for each other. They could take turns being the teacher (the one who wrote the quiz) and the student (who takes the quiz). They may even like to make a quiz for you to take!

➔ Extra Practice Sheets 18 and 19 provide more work in place values and writing numbers.

11

☐ Count forward and backward by 3's to 30.
☐ Practice your M and ×0 flash cards for 5 minutes.
☐ Do Speed Drill 11 on page 70.
☐ Record your score in the graph on page 64.

☐ **I passed the pretest in Lesson 10.**
Now I will do the pretest on pages 37, 38.
I may also do *Extra Activity Sheet* (1, 2, 3, 4, 5, 6, 7).

☐ **I did not pass the pretest in Lesson 10.**
I will do all of Lesson 11.

Practice Set – Numbers

△ **Read the numbers aloud.**

1.   603   420   700   1,684   694   80   4,506

Expand the numbers.

2. 548 = __500 + 40 + 8__   486 = __400 + 80 + 6__

3. 329 = __300 + 20 + 9__   266 = __200 + 60 + 6__

Write the correct digit from the numbers.

4. 743   ones place __3__   hundreds place __7__   tens place __4__

5. 347   tens place __4__   ones place __7__   hundreds place __3__

36

Lesson 11

Write the numbers.

6. fifty-six   __56__   four thousand   __4,000__

7. six thousand   __6,000__   nine hundred   __900__

8. seven hundred two   __702__   sixty-eight   __68__

9. five hundred twenty-two __522__   nine thousand, two   __9,002__

10. four thousand, forty-one __4,041__

Pretest – Patterns   29/32

Finish each number sentence by writing < or >. (1 point each.) [4]

1. 54 [>] 45   12 – 4 [>] 4   2 + 3 [<] 6   18 [<] 81

Finish each number sentence by writing = or ≠. (1 point each.) [4]

2. 36 [≠] 63   12 – 3 [=] 9   2 + 2 [≠] 7   18 [=] 18

Write the hundreds that come before and after *372.* (1 point each.) [2]

3. [300]   372   [400]

Circle the number that is greatest. Underline the number that is least.
(1 point each.) [2]

4. 462   394   (629)   243

Circle the numbers that come between *751* **and** *932.* (1 point each possibility.) [5]

5. 599   (842)   (900)   969   700

37

Lesson 11

Write the tens that come before and after *64.* (1 point each.) [2]

6. (60)   64   (70)

Circle the correct sentence. (1 point.) [1]

7. (The kitten is vertical.)
      The kitten is horizontal.

In each row, circle two figures that are congruent with the first one.
(1 point each.) [4]

8.

9.

Write the number that is halfway between these tens or hundreds.
(1 point each.) [6]

10. 40 __45__ 50   10 __15__ 20   80 __85__ 90

11. 300 __350__ 400   600 __650__ 700   500 __550__ 600

Draw two more shapes to continue the pattern. (1 point each.) [2]

12. ○ △ ○ ○ △ △ ○ ○ ○ △ __△__ __△__

○ **Ask your teacher to look over this pretest and mark the boxes on page 39.**

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