

3rd Grade Module 7 Lesson 29

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- > Within Google Slides (not Chrome), choose FILE.
- ➤ Choose MAKE A COPY and rename your presentation.
- ➤ Google Slides will open your renamed presentation.
- ➤ It is now editable & housed in MY DRIVE.



#### Icons





Read, Draw, Write











Manipulatives Needed







A STORY OF UNITS



#### Lesson 29

Objective: Solve a variety of word problems involving area and perimeter using all four operations.

#### Suggested Lesson Structure

Total Time	(60 minutes)
Student Debrief	(10 minutes)
Concept Development	(36 minutes)
Fluency Practice	(14 minutes)





#### I can solve a variety of word problems involving area and perimeter using all four operations.



## Fluency Practice

#### Sprint: Multiply or Divide by 8 (10 minutes)

A STORY OF UNITS			Lesson 29 Sprint 3•7		
A Multiply	or Divide by 8		Number Cor	rect:	
1.	2 × 8 =	23.	× 8 = 80		
2.	3 × 8 =	24.	× 8 = 16		
з.	4 × 8 =	25.	× 8 = 24		
4.	5 × 8 =	26.	80 ÷ 8 =		
5.	1 × 8 =	27.	40 ÷ 8 =		
6.	16 ÷ 8 =	28.	8 ÷ 8 =		
7.	24 ÷ 8 =	29.	16 ÷ 8 =		
8.	40 ÷ 8 =	30.	24 ÷ 8 =		
9.	8 ÷ 8 =	31.	× 8 = 48		



Find the Perimeter (4 minutes)

8 m



Perimeter = 22 m

On your personal white board, write the length of this rectangle.

On your board, write the perimeter of this rectangle. Write a four-step addition sentence if you need to.



Find the Perimeter (4 minutes)

8 m



Perimeter = 22 m

On your board, sketch a rectangle that has an area of 24 square meters but different side lengths than this rectangle. Then, calculate the perimeter of the new rectangle.



On your personal white board, write the length of this rectangle.

On your board, write the perimeter of this rectangle. Write a four-step addition sentence if you need to.



On your board, sketch a rectangle that has an area of 22 square inches but different side lengths than this rectangle. Then, calculate the perimeter of the new rectangle.



Find the Perimeter (4 minutes)

6 cm



Perimeter = <u>18 cm</u>

On your personal white board, write the length of this rectangle.

On your board, write the perimeter of this rectangle. Write a four-step addition sentence if you need to.



Find the Perimeter (4 minutes)

6 cm



Perimeter = <u>18 cm</u>

On your board, sketch a rectangle that has an area of 18 square centimeters but different side lengths than this rectangle. Then, calculate the perimeter of the new rectangle.

# Concept Development

(35 minutes)

Get out your Lesson 29 Problem Set. We will using our Read Draw Write strategy to solve story problems involving area and perimeter.

Problem 1: Kyle puts two rectangles together to make the L-shaped figure below. He measures some of the side lengths and records them as shown. a. Find the perimeter of Kyle's shape. b. Find the area of Kyle's shape. c. Kyle makes two copies of the L-shaped figure to create the rectangle shown below. Find the perimeter of the rectangle.

# Concept Development

(35 minutes)

Problem 2: Jeremiah and Hayley use a piece of rope to mark a square space for their booth at the science fair. The area of their space is 49 square feet. What is the length of the rope that Jeremiah and Hayley use if they leave a 3-foot opening so they can get in and out of the space?

# Concept Development

(35 minutes)

Problem 3: Vivienne draws four identical rectangles as shown below to make a new, larger rectangle. The perimeter of one of the small rectangles is 18 centimeters, and the width is 6 centimeters. What is the perimeter of the new, larger rectangle?





(35 minutes)

Problem 4: A jogging path around the outside edges of a rectangular playground measures 48 yards by 52 yards. Maya runs 3 **11 22** laps on the jogging path. What is the total number of yards Maya runs?



### Debrief (10 minutes)

- How were you able to figure out the unknown side lengths in Problem 1(a)?
- Problem 1(c) had a rectangle formed from combining two copies of the shape from Problem 1 (a) and (b). Why was the answer in Problem 1(c) not double the answer of Problem 1(a)?
- How did you figure out the side lengths for the smaller rectangles in Problem 3?
- Describe the steps you took to solve Problem 4.
- How were today's problems similar to yesterday's problems? How were they different?
- What complexity did you notice in each problem of the Problem Set today?



### Exit Ticket (3 minutes)

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Lesson 29 Exit Ticket 3•7

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Date

Jeannette draws four identical squares as shown below to make a new, larger square. The length of one of the small square sides is 8 centimeters. What is the perimeter of the new, larger square?

