Eureka Math

3rd Grade
Module 7
Lesson 16

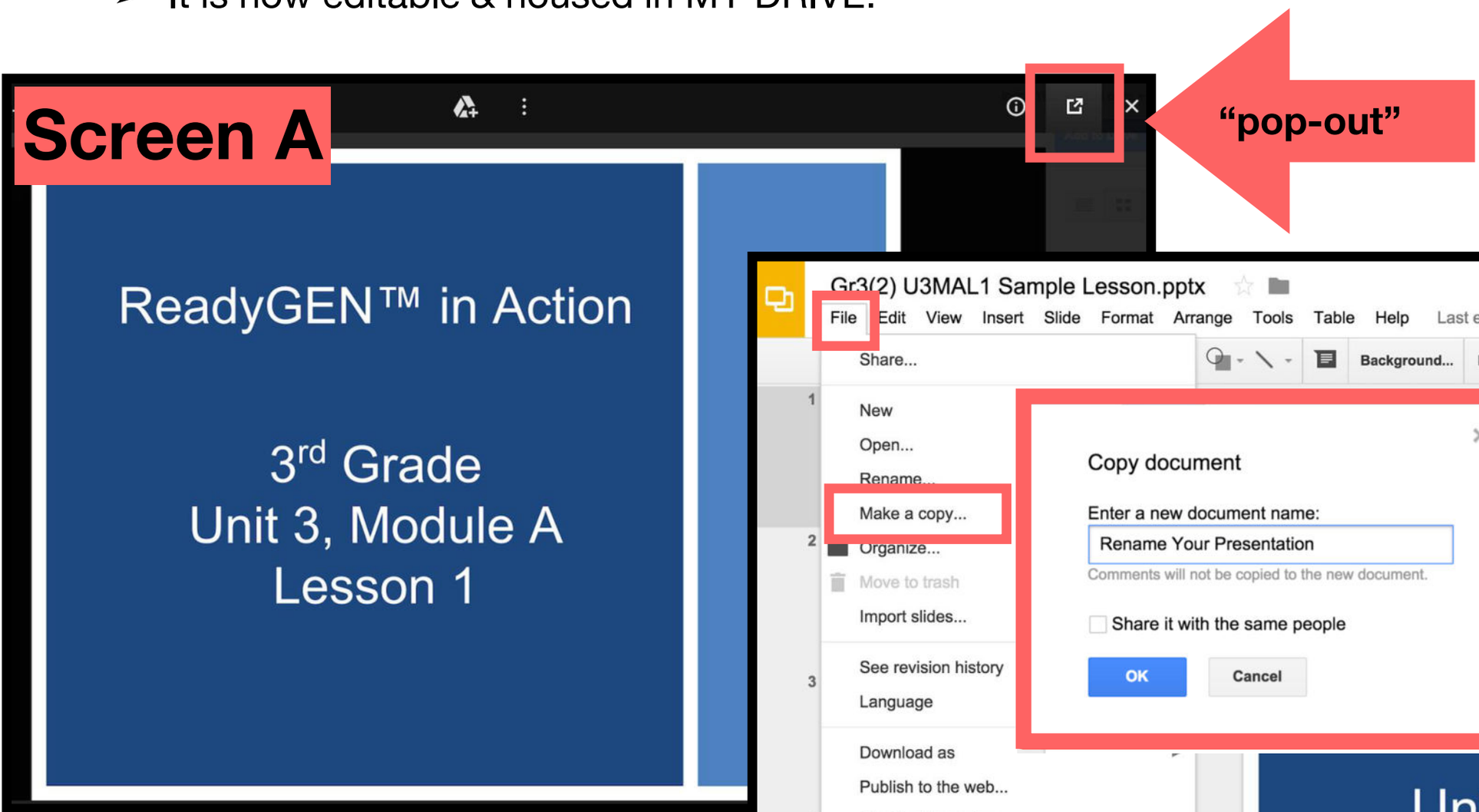
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

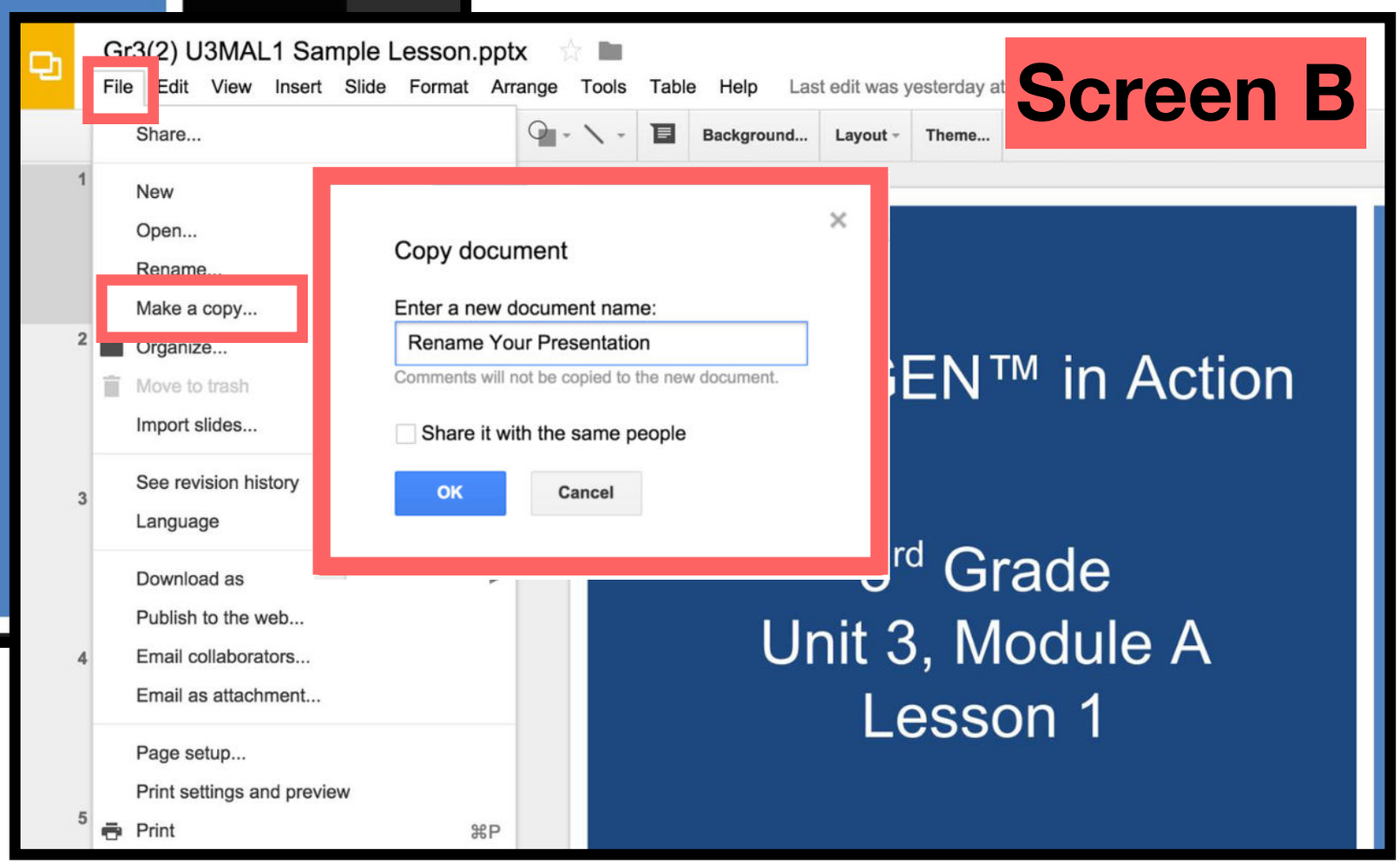
Directions for customizing presentations are available on the next slide.

Customize this Slideshow

Reflecting your Teaching Style and Learning Needs of Your Students

- When the Google Slides presentation is opened, it will look like Screen A.
- Click on the “pop-out” button in the upper right hand corner to change the view.
- The view now looks like Screen B.
- 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

Learning Target

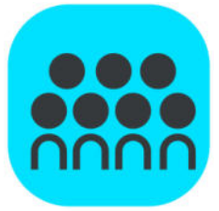
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

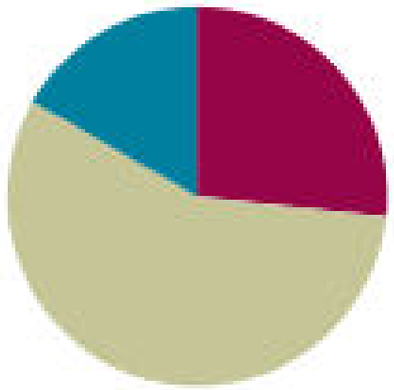
Small Group Time

Lesson 16

Objective: Use string to measure the perimeter of various circles to the nearest quarter inch.

Suggested Lesson Structure

Fluency Practice	(16 minutes)
Concept Development	(34 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can use string to measure the perimeter of various circles to the nearest quarter inch.

Fluency Practice

Multiply or Divide by 3 (8 minutes)

Multiply.

9 x 1 = _____	9 x 2 = _____	9 x 3 = _____	9 x 4 = _____
9 x 5 = _____	9 x 6 = _____	9 x 7 = _____	9 x 8 = _____
9 x 9 = _____	9 x 10 = _____	9 x 5 = _____	9 x 6 = _____
9 x 5 = _____	9 x 7 = _____	9 x 5 = _____	9 x 8 = _____
9 x 5 = _____	9 x 9 = _____	9 x 5 = _____	9 x 10 = _____
9 x 6 = _____	9 x 5 = _____	9 x 6 = _____	9 x 7 = _____

Fluency Practice

Equivalent Counting with Units of 6 (4 minutes)

Count by sixes to 60

6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Count to 10 sixes

1 six, 2 sixes, 3 sixes, 4 sixes, 5 sixes, 6 sixes, 7 sixes, 8 sixes, 9 sixes, 10 sixes

Let’s count to 10 sixes again. This time, stop when I raise my hand.

Say the multiplication sentence. Let’s count back down, starting at 10 sixes.

Fluency Practice

Find the Perimeter (4 minutes)

What is the length of the rectangle?

What’s the width of the rectangle?

On your personal white board, find the perimeter by writing an addition sentence.

Fluency Practice

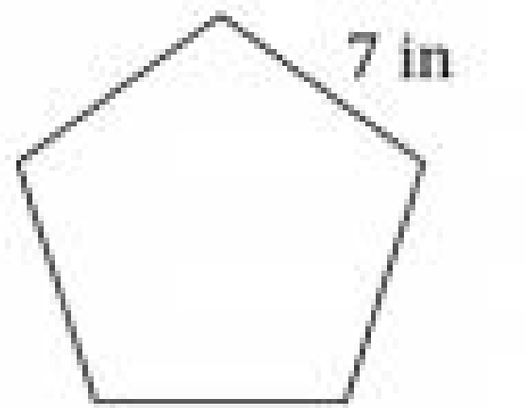
Find the Perimeter (4 minutes)

What's the length of each side of the square?

On your personal white board, find the perimeter by writing an addition sentence.

Fluency Practice

Find the Perimeter (4 minutes)

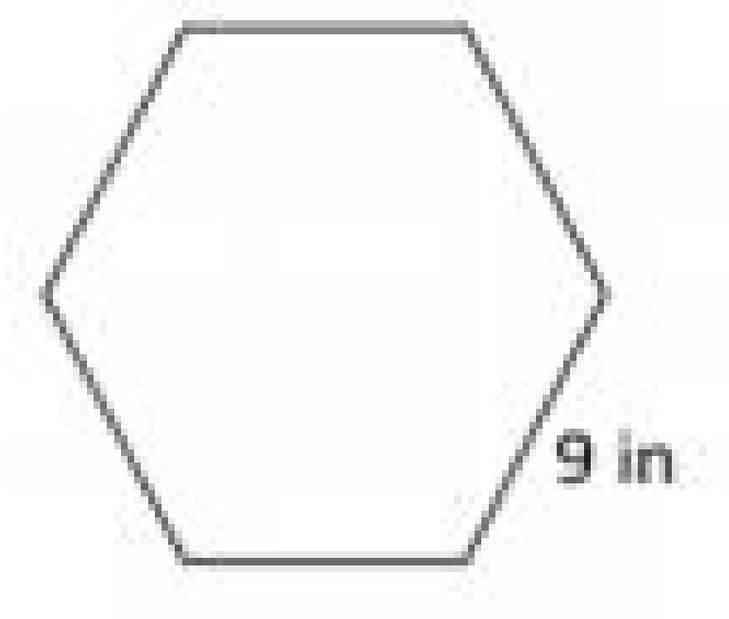


What's the length of each side of the pentagon?

On your personal white board, find the perimeter by writing an addition sentence.

Fluency Practice

Find the Perimeter (4 minutes)



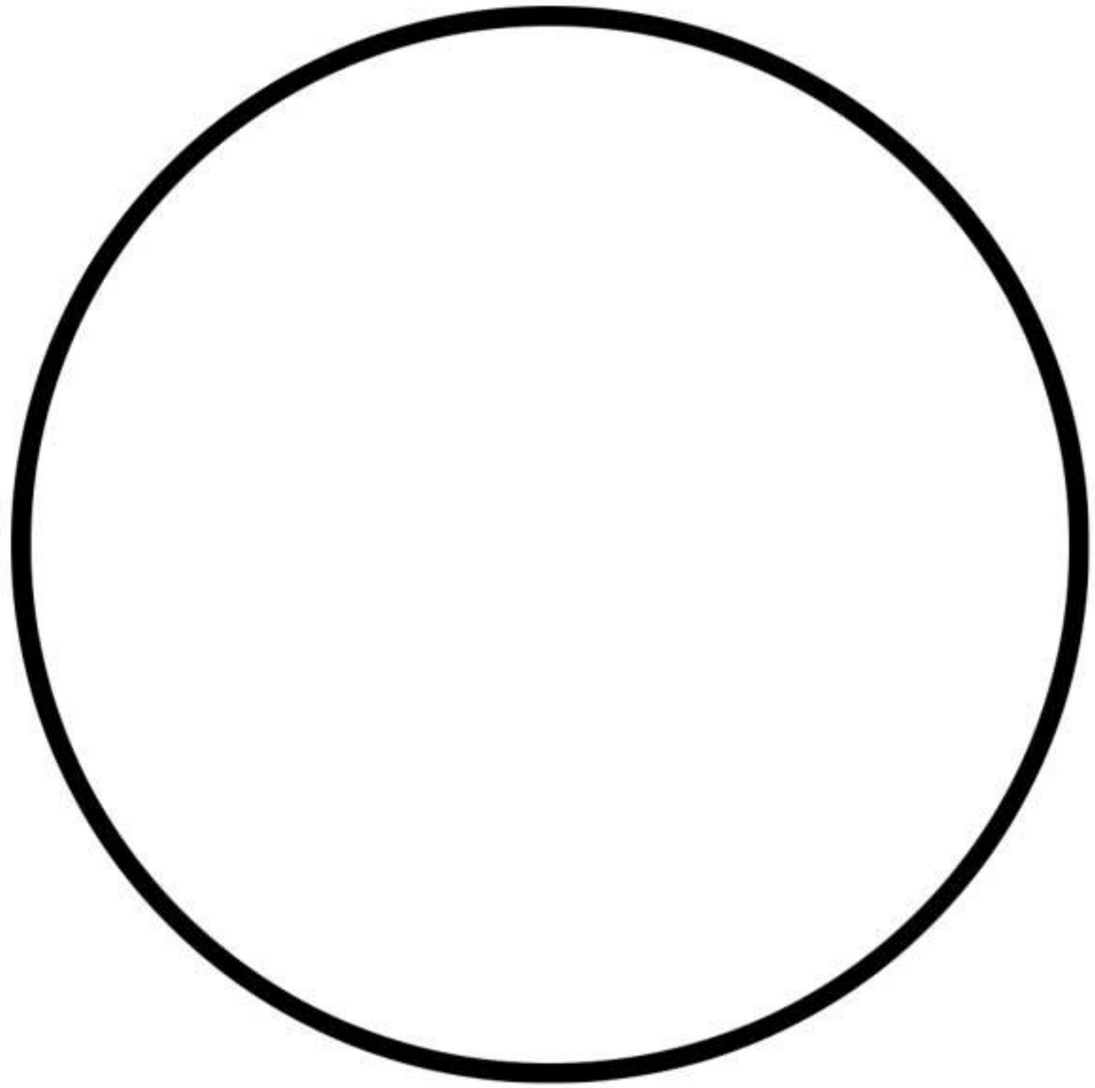
What's the length of each side of the pentagon?

On your personal white board, find the perimeter by writing an addition sentence.

Concept Development

Talk to your partner. Does this circle have a perimeter?

Remember when we made tessellations? Those shapes didn't have straight lines, but they still had perimeters. The black line shows the boundary of the circle, so that's the circle's perimeter.

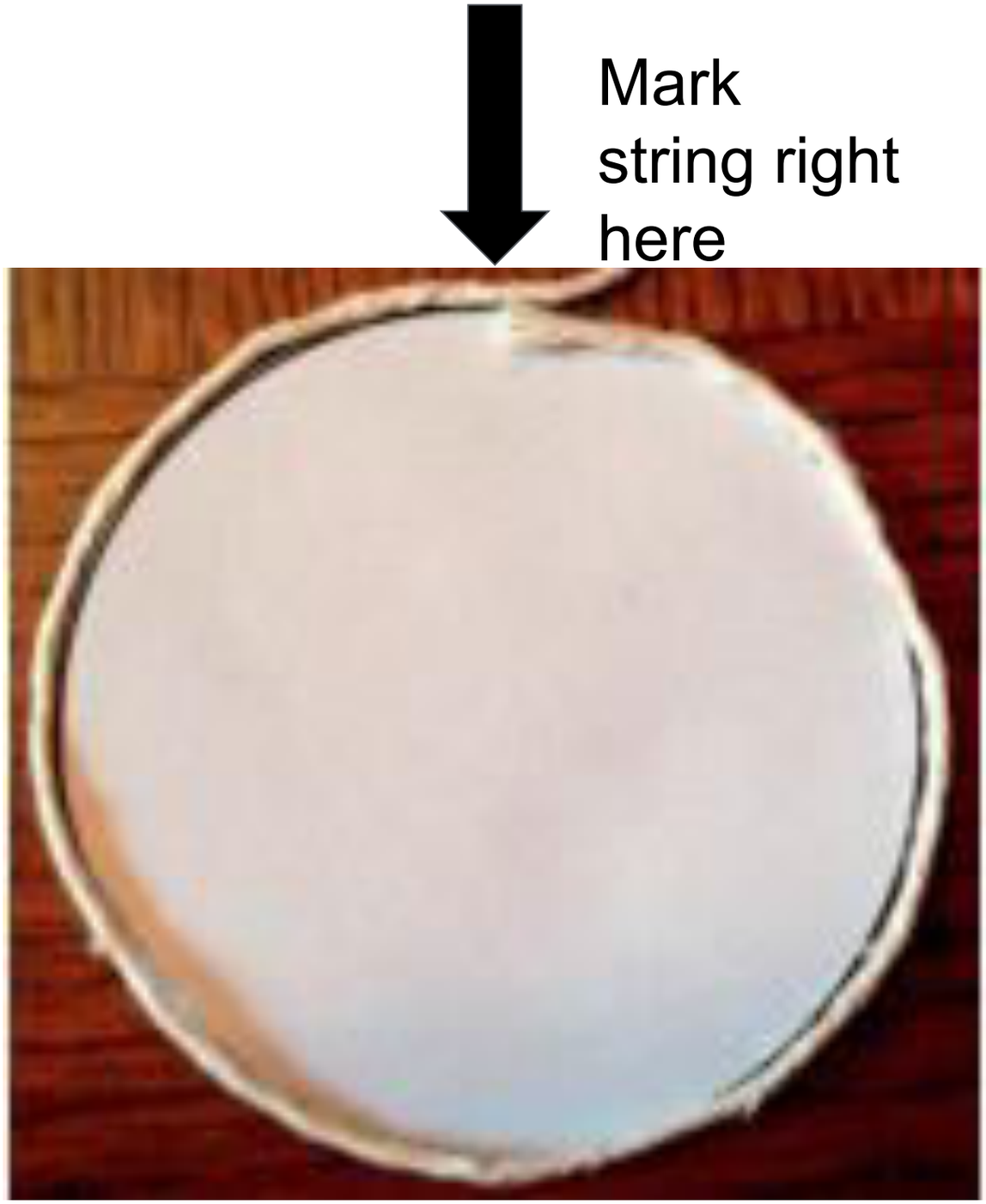


Concept Development

Can you find the perimeter of the circle in inches using just your ruler?

Work with your partner to wrap the string around the perimeter of the circle.

Use a black marker to mark the string where it meets the end after going all the way around once.



Concept Development

What does the string around the circle represent?

The perimeter of the circle.

How can you use this string and your ruler to find the perimeter of the circle?

Work with your partner to measure the length of the string from the end to where you made the mark. Record your measurement on your personal white board to the nearest quarter inch. What is the length of the string to the nearest quarter inch?

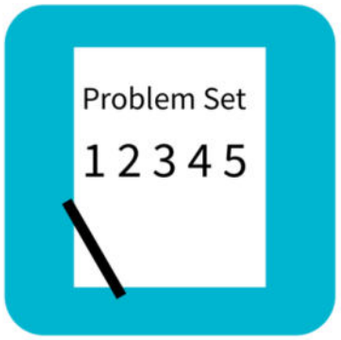
Concept Development

Work with a partner at your station to complete the chart in Problem 1 of the Problem Set.

Use your string and a ruler to find the perimeters of 10 circular objects.

Record the perimeters in the chart to the nearest quarter inch.

Use different color markers to mark the perimeter of each object on the string so you can keep track of the length you are measuring.



Problem Set

Name _____ Date _____

1. Find the perimeter of 10 circular objects to the nearest quarter inch using string. Record the name and perimeter of each object in the chart below.

Object	Perimeter (to the nearest quarter inch)

Debrief

- Look at your answers in the chart in Problem 1. Which circular object has the smallest perimeter? The greatest perimeter?
- Discuss your answer to Problem 1(b) with a partner. Can you use just a ruler to find the perimeter of this shape? Why or why not? Can you use your ruler to measure some of the side lengths? Which ones? Then, how would you find the total perimeter?
- Talk to a partner: Do you think the method we used today to find the perimeter of a circle gives the exact perimeter? Why or why not?
- Describe the steps you used to find the perimeter of the circle in Problem 3.
- Share your answers to Problem 4.

Exit Ticket (3 minutes)

Name _____ Date _____

Use your string to the find the perimeter of the shape below to the nearest quarter inch.