### Eureka Math

4th Grade Module 7 Lesson 3

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.



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#### Icons





Read, Draw, Write



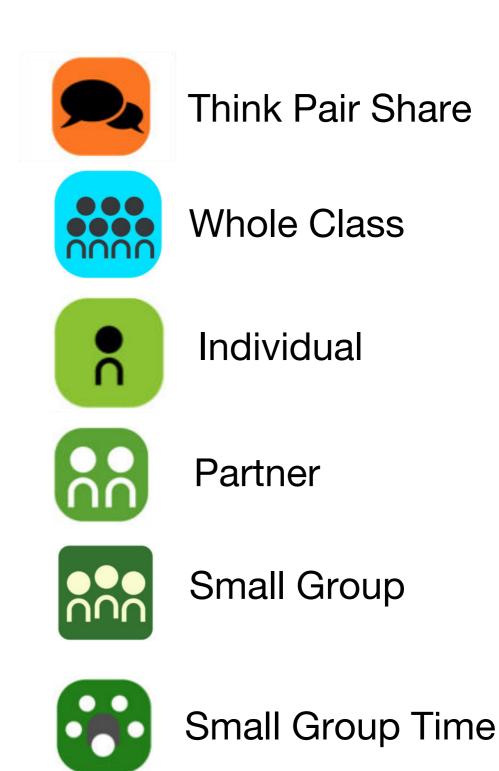








Manipulatives Needed





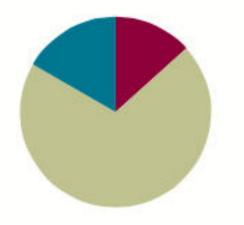


#### Lesson 3

Objective: Create conversion tables for units of time, and use the tables to solve problems.

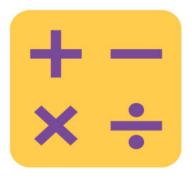
#### **Suggested Lesson Structure**

- Fluency Practice (8 m
  Concept Development (42 m
  Student Debrief (10 m
  Total Time (60 m
- (8 minutes) (42 minutes) (10 minutes) (60 minutes)





I can create conversion tables for units of time, and use the tables to solve problems.



#### **Convert Length Units**

4km=\_\_\_\_m

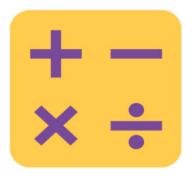
3km=\_\_\_\_m

8m=\_\_\_cm

9m=\_\_\_\_cm

9yd=\_\_\_\_ft

4ft=\_\_\_in



#### **Convert Capacity Units**

- 1 gal=\_\_\_\_qt
- 9 gal=\_\_\_\_qt
- 1 qt=\_\_\_\_pt.
- 4 qu=\_\_\_\_pt
- 1 pt=\_\_\_\_c
- 6 pt=\_\_\_\_c



# **RDW** Application Problem

No problem today!

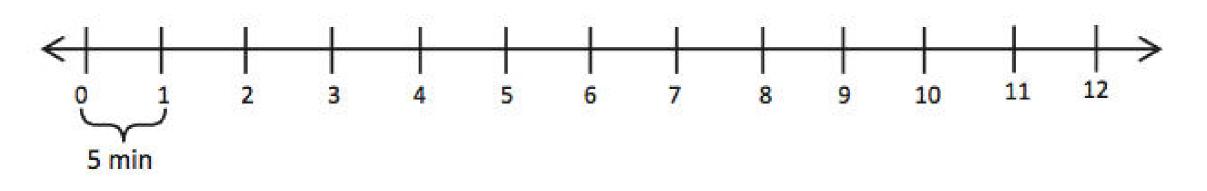
#### Convert minutes to seconds

This clock has two hands. What units do the hands count? How many seconds are in a minute? Work with your group to complete the conversion table!

### Convert hours to minutes

Let's imagine, as we practiced in Grade 3, that we unwrap the clock on a number line.

We can use the number line to help us determine the number of minute in ONE hour.

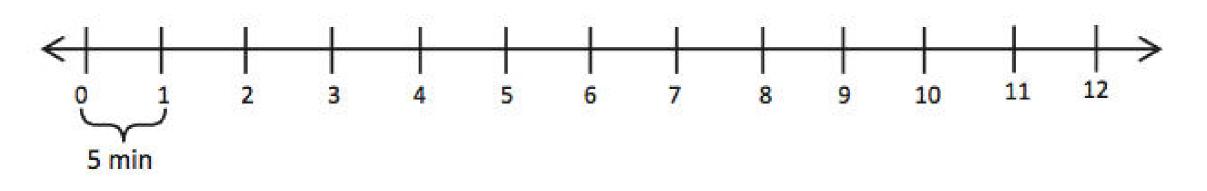


Work with your group to complete the conversion table!

### Convert hours to minutes

Let's imagine, as we practiced in third grade, that we unwrap the clock on a number line.

We can use the number line to help us determine the number of minute in ONE hour.



Work with your group to complete the conversion table!

### Convert days to hours

Think about how many hours in a day? Use a number if that would help.

How many hours are in a day?

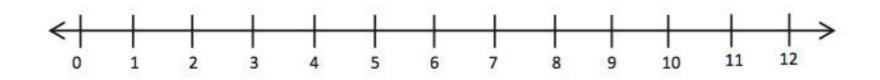
Work with your group to complete the conversion table.

# Word problems

The Apollo 17 mission was completed in 12 days, 14 hours. How many hours did the mission last?

Problem Set 12345	Problem Set	
A STORY OF UNITS	Lesson 3 Problem Set	4•7
Name	Date	

 Courtney needs to leave the house by 8:00 a.m. If she wakes up at 6:00 a.m., how many minutes does she have to get ready? Use the number line to show your work.



2. Giuliana's goal was to run a marathon in under 6 hours. What was her goal in minutes?



# Debrief

- Explain how you could solve Problem 1 without a number line.
- Would it make sense to solve Problem 2 in seconds? Why or why not?
- Explain two strategies for solving problems converting a number of days to hours. Which method is most efficient and why? Which strategy did you use to solve Problem 7?
- Can anyone describe how time is kept in the military or in a foreign country? Is time (seconds, minutes, hours) defined as a metric or customary system?

# Exit Ticket

A STORY OF UNITS	Lesson 3 Exit Ticket 4•7
Name	Date

The astronauts from Apollo 17 completed 3 spacewalks while on the moon for a total duration of 22 hours 4 minutes. How many minutes did the astronauts walk in space?