

Eureka Math

4th Grade Module 5 Lesson 1

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Directions for customizing presentations are available on the next slide.



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Icons



Read, Draw, Write



Learning Target



Personal White Board



Problem Set



Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



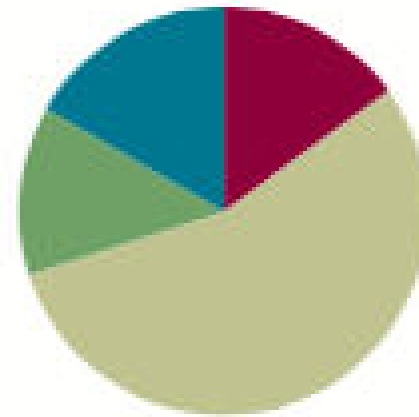
Small Group Time

Lesson 1

Objective: Decompose fractions as a sum of unit fractions using tape diagrams.

Suggested Lesson Structure

| | |
|-----------------------|---------------------|
| ■ Fluency Practice | (9 minutes) |
| ■ Application Problem | (8 minutes) |
| ■ Concept Development | (33 minutes) |
| ■ Student Debrief | (10 minutes) |
| Total Time | (60 minutes) |



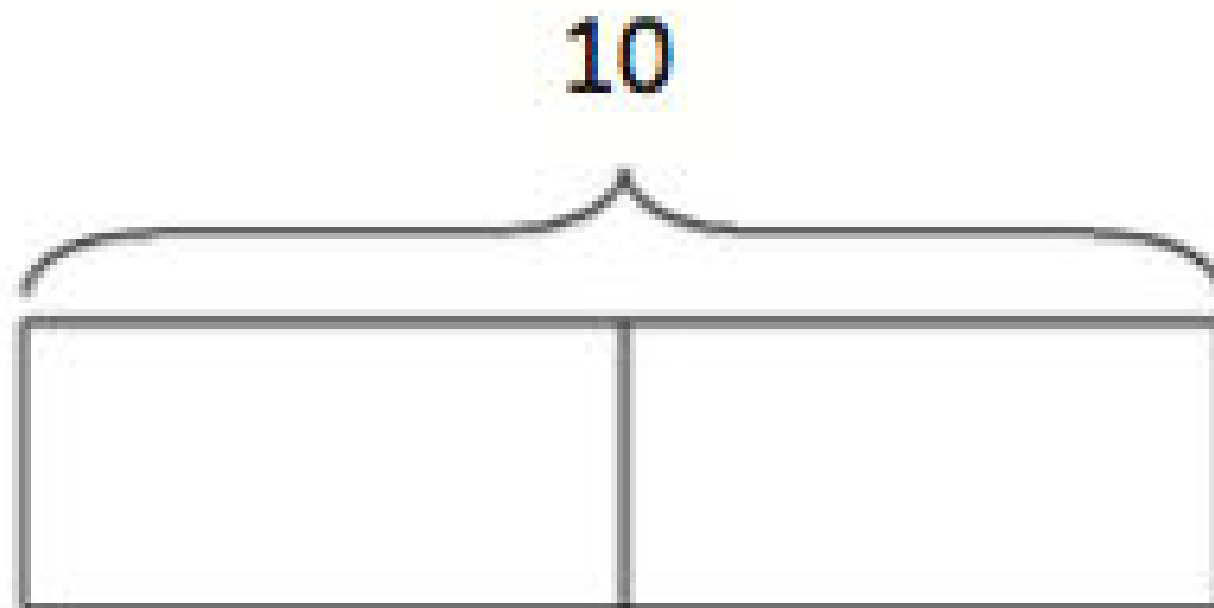


Decompose fractions as a SUM of unit fractions
using tape diagrams.



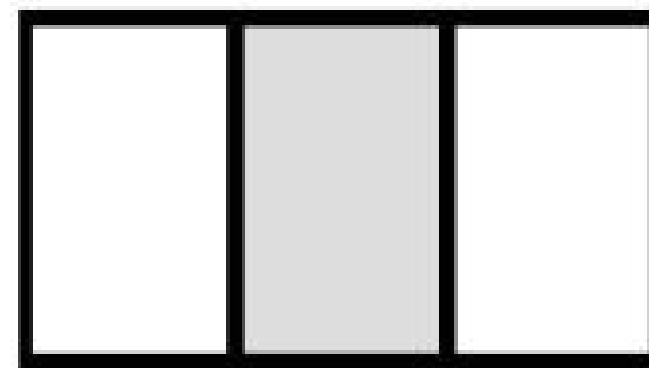
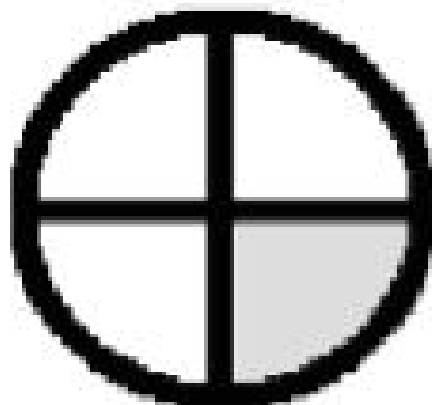
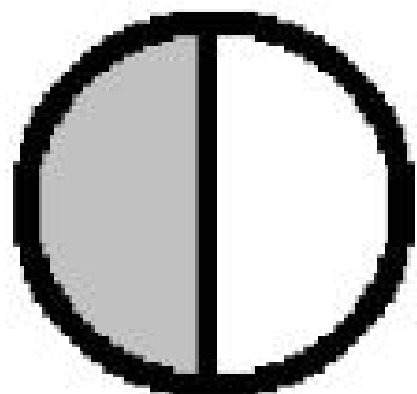
Read tape diagrams

What could this tape diagram mean. Talk with your group members.





Add fractions



- What part of the first circle is shaded?
- Write the fraction down.
- What part is not shaded?
- Write that fraction down.
- When we add those two fractions together, what do we get?



Application Problem

See page 5.A.5 for direction on how to complete the application problem.

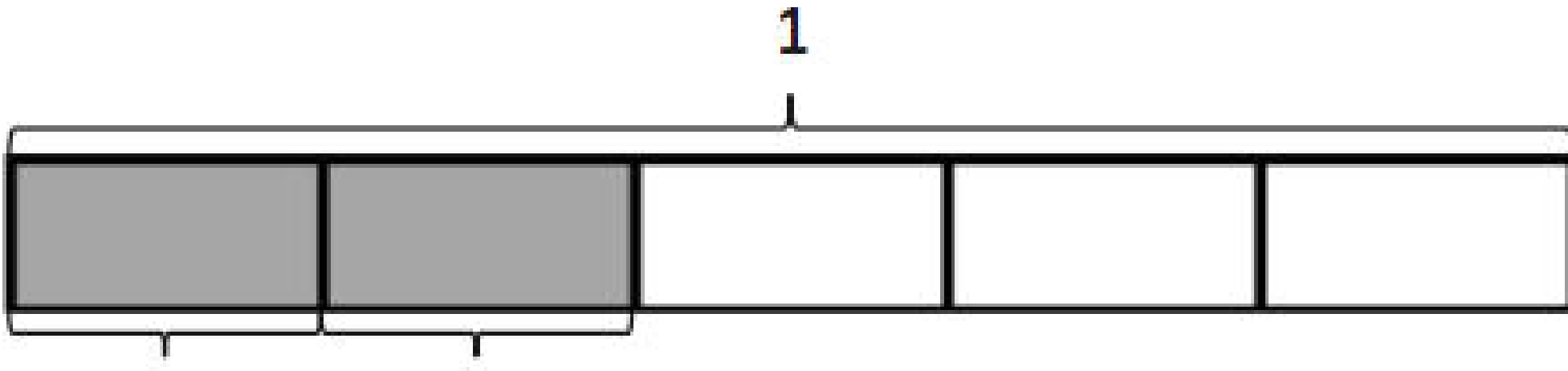


Paper activity

- Look at page 5.A.6 for activity.



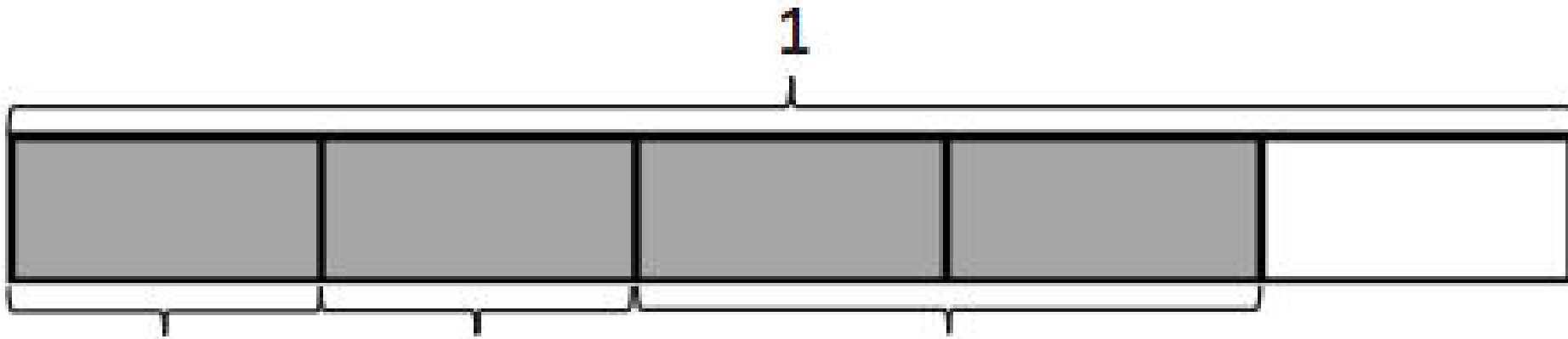
Decompose using a tape diagram



- Let's look at this tape diagram.
- What is the whole?
- How many parts is it split into?
- What does the shaded part represent?
- What is the UNIT fraction?
- Decompose 2 fifths into a sum of unit fractions.



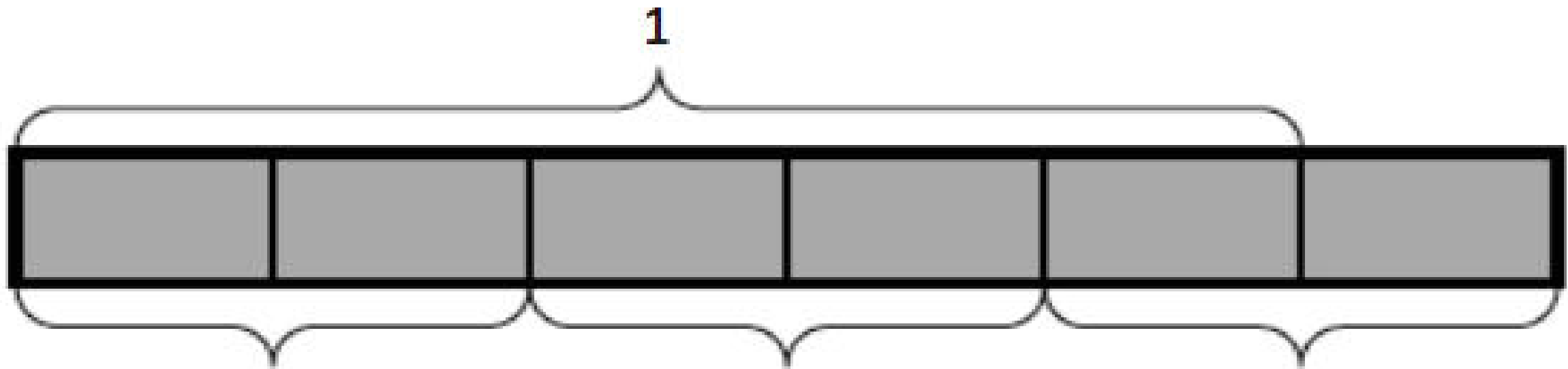
Decompose using a tape diagram



- Let's look at this tape diagram.
- What is the whole?
- How many parts is it split into?
- What does the shaded part represent?
- What is the UNIT fraction?
- Decompose 4 fifths into a sum of unit fractions.



Decompose using a tape diagram



- Let's look at this tape diagram.
- What is the whole?
- How many parts is it split into?
- What does the shaded part represent?
- What is the UNIT fraction?
- Decompose 4 fifths into a sum of unit fractions.



Modeling on a tape diagram

$$\frac{6}{6} = \frac{1}{6} + \frac{2}{6} + \frac{3}{6}$$

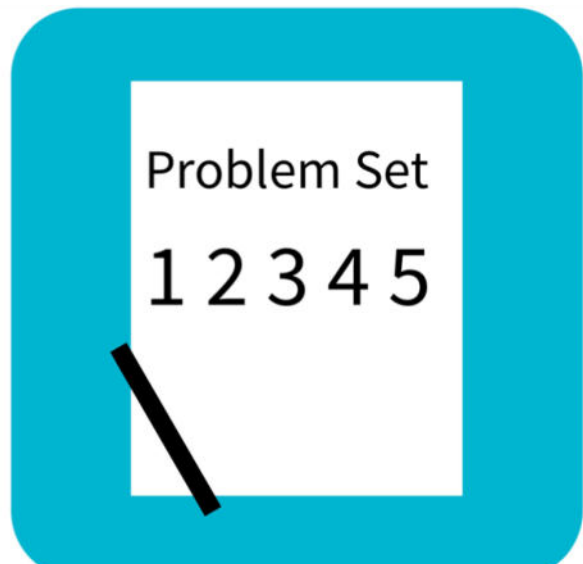
- What would this look like on a tape diagram.
- Draw it with your partner
- Decompose it ONLY using UNIT fractions



Modeling on a tape diagram

$$\frac{8}{6} = \frac{4}{6} + \frac{4}{6}$$

- What would this look like on a tape diagram.
- Draw it with your partner
- Decompose it ONLY using UNIT fractions



Problem Set

Name _____

Date _____

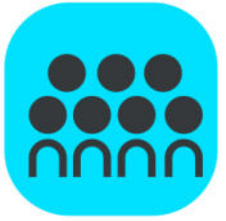
1. Draw a number bond, and write the number sentence to match each tape diagram. The first one is done for you.

a.

The diagram shows a tape diagram with a total of 1 above it, divided into three equal shaded sections. Below the tape diagram is the number sentence $1 = \frac{1}{3} + \frac{1}{3} + \frac{1}{3}$. To the right is a number bond with a top circle containing 1 and three bottom circles, each containing $\frac{1}{3}$.

b.

The diagram shows a tape diagram with a total of 1 above it, divided into four equal shaded sections and one empty section on the right.



Debrief

- Compare the size of the shaded fractions in Problems 1(c) and 1(e). Assume the wholes are equal. What can you infer about the two number sentences?
- How do the number bonds connect to the number sentences?
- How did using the paper strips during our lesson help you visualize the tape diagrams you had to draw in Problem 2?
- What relationship does the unit fraction have with the number of units in a whole?
- How did the Application Problem connect to today's lesson?

Exit Ticket

Name _____

Date _____

1. Complete the number bond, and write the number sentence to match the tape diagram.

