**Name:** _____ **Teacher:** _____ **School:** _____
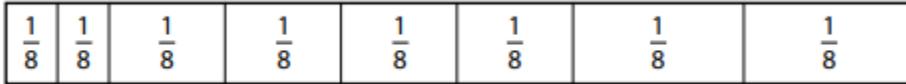
**Grade 4: Lesson 6**   Compose Fractions

Remember that a fraction is a number that names equal parts of a whole.

1. Does the model below show eighths? Why or why not?

| $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ |
|---|---|---|---|---|---|---|---|

2. Divide this rectangle to show eighths. Use the rectangle to show 3/8 + 2/8.

3. Maria, Jon, and Kara share a set of 10 animal stickers. Maria gets 2 stickers, Jon gets 4 stickers, and Kara gets the rest of the stickers. What fraction of the stickers does Kara get? Solve the problem. Draw a picture to show your thinking. Write an addition equation to check your answer.

4. Amaria has brownies at her birthday party.  There are a total of 12 brownies.  There are 5 brownies with cream cheese frosting. There are 4 plain chocolate brownies. There are 3 chocolate brownies with nuts. Write a fraction to represent each type of brownie. Write a fraction addition equation to show the total number of brownies. Draw pictures below to show your work.

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**Name:** _____ **Teacher:** _____ **School:** _____

**Grade 4: Lesson 7**  Add Fractions

**Use the diagram to solve problems 1 through 3:**
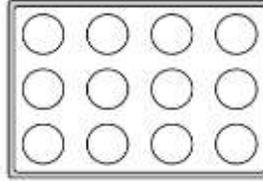
1.  Sam fills 2/12 of a muffin pan with banana muffin batter. Shade 2/12 of the muffin pan diagram.

2.  Then Sam fills 6/12 with lemon muffin batter. Shade 6/12 of the diagram to show this.

3.  In problem 2, what fraction of the pan in all is filled now? _____
    Write an equation for this problem that includes your answer.

**Use the following information to solve problems 4 through 8:**

Kay runs 6/8 of a mile and rests. Then she runs another 6/8 of a mile.

4.  Divide the number line below to show eighths.
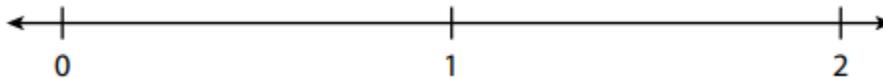
5.  Label 6/8 on the number line above.

6.  Use arrows to show 6/8 + 6/8 on the number line.

7.  What is the total distance Kay runs? _____

8.  Write an equation for this problem that includes your answer.

Sourced from Curriculum Associates

**Name:** _____ **Teacher:** _____ **School:** _____

**Grade 4: Lesson 8**  Subtract Fractions

**Use the following information to solve problems 1 through 4:**

Keisha is at her friend's house. Her friend's house is 8/10 of a mile from Keisha's home. Keisha walks 3/10 of a mile toward home. Then her mother drives her the rest of the way home.

1. Divide the number line below to show tenths. Then label each tick mark.



2. Use arrows to show the problem on the number line you labeled in problem 1.

3. How far does Keisha's mother drive her? _____

4. Write an equation for this problem that includes your answer.

5. Anna makes a quilt by sewing together green, white, and yellow fabric. When she finishes, 2/6 of the quilt is green, and 3/6 is yellow. The rest is white. What fraction of the quilt is white? Show your work.

6. Find 9/8 - 8/8. Use a number line or an area model to show your thinking.
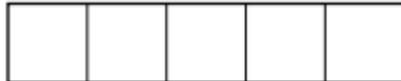
**Name:** _____ **Teacher:** _____ **School:** _____

**Grade 4: Lesson 9** Decompose Fractions

1. Complete the equations to show how to decompose 3/5 in two different ways.

   a. 3/5 = 1/5 + _____

   b. 3/5 = 1/5 + _____ + 1/5

2. Shade the area model below to show the equation in problem 1a.

3. Select all the equations that show a correct way to represent 7/10.

   a. 1/10 + 5/10 = 7/10

   b. 2/10 + 5 /10 = 7/10

   c. 1/10 + 2/10 + 4/10 = 7/10

   d. 1/10 + 4/10 + 3/10 = 7/10

   e. 1/10 + 1/10 + 1/10 + 1/10 + 1/10 + 1/10 + 1/10 = 7/10

4. Vijay has 6/6 of a cup of raisins. He wants to put the raisins into three snack bags. What are two different ways he could put raisins into three snack bags? Use a model to show each way. Show your work.

5. Is 7/12 + 1/12 equivalent to 4/12 + 4/12? Explain your answer.

**Grade 4: Lesson 10**   Add and Subtract Fractions

1. Lee makes muffins. She uses 2/3 of a cup of milk and 1/3 of a cup of oil. How much more milk than oil does she use? Show your work.

2. Lucy and Melody work together to paint 6/8 of a room. Which models could be used to show how much of the room each girl paints?

   a.

   b.

   c.

   d.   6/8 = 3/8 + 3/8

   e.   6/8 = 5/8 + 1/8

3. Cole and Max pick 9/10 of a bucket of blueberries in all. Cole picks 3/10 of a bucket of blueberries. What fraction of a bucket of blueberries does Max pick? Show your work.

4. Ms. Jones cuts an apple into eighths. She eats 3/8 of the apple and gives the rest to her son and daughter. Describe two different ways her son and daughter can share the rest of the apple if they each have some of the apple.