Unit 4, Activity 2, What about Fractions?

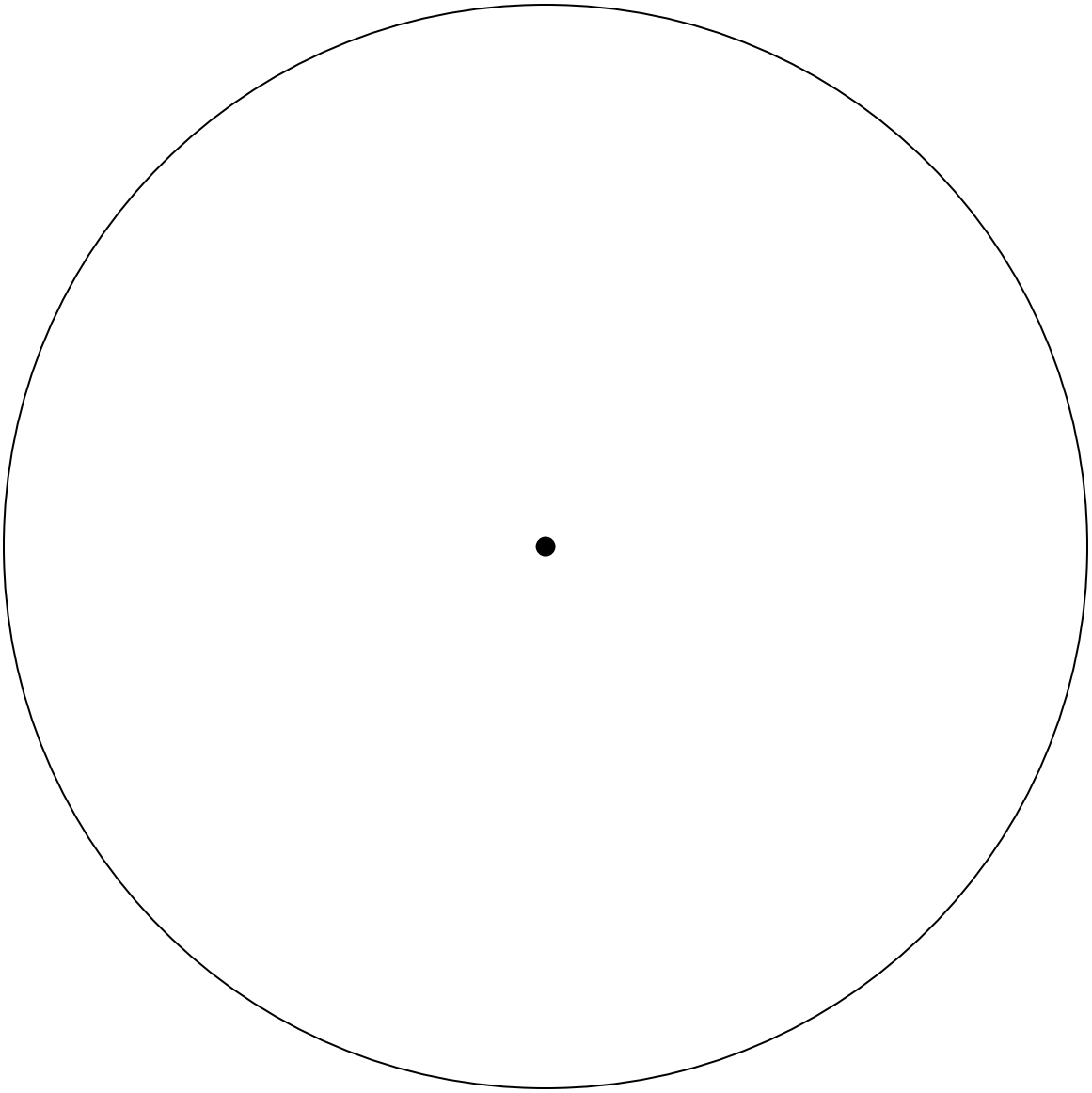
Name: _____ Date: _____

Word/Phrase	+	√	−	**Example**	**Definition**
numerator					
denominator					
mixed number					
improper fraction					
equivalent fractions					
simplest form					

Mark your understanding of each word. A "+" means understands well, a "√" means some understanding, and a "–" means do not know.

If your understanding changes as the class completes the fraction activities, mark another column. You might begin this unit with a "–" for the phrase simplest form, mark a "√" in the middle of the unit, and then mark a "+" by the end of the activities. The goal is to have all plusses by the end of the unit.

Name: _____ Date: _____



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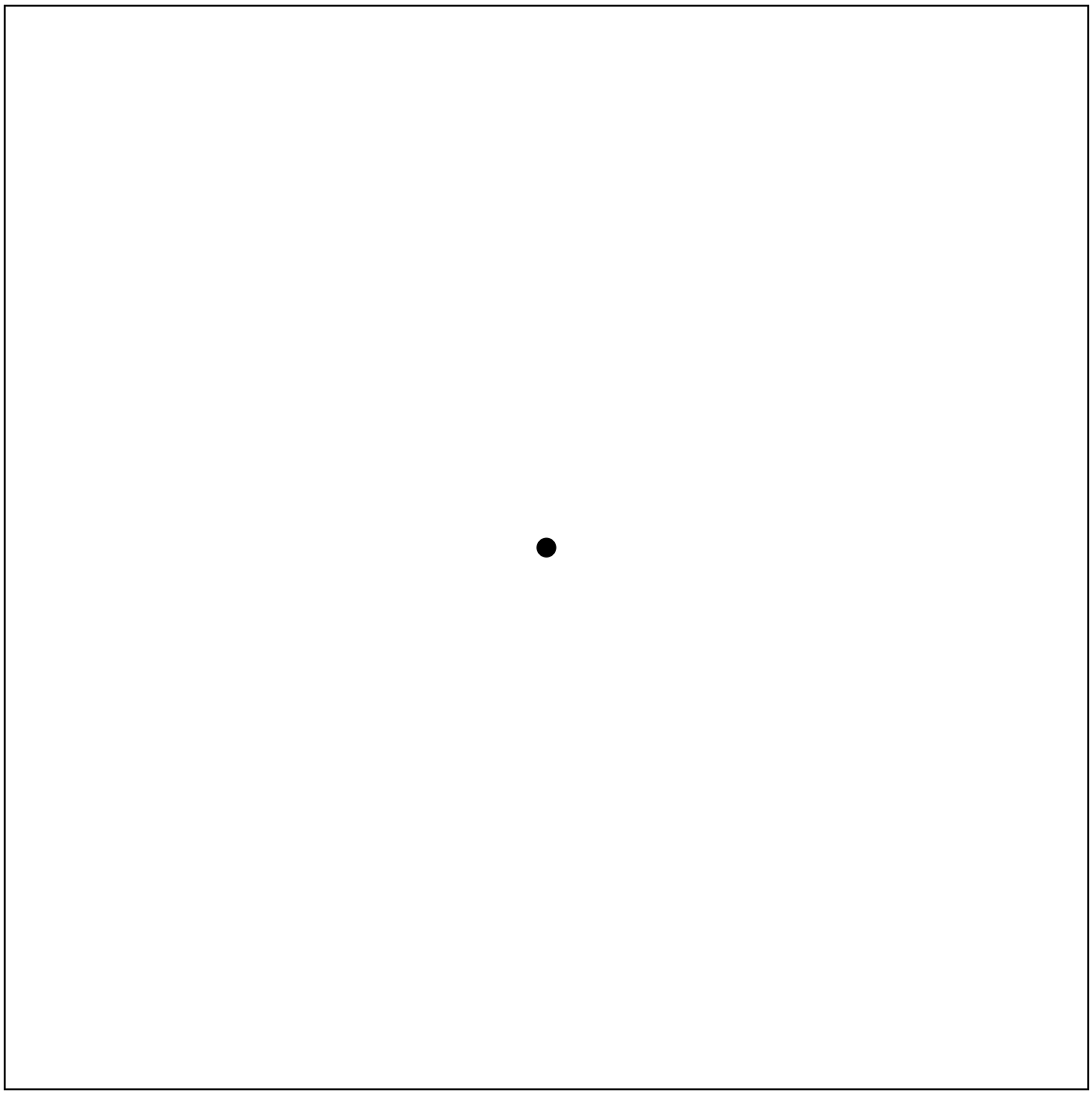

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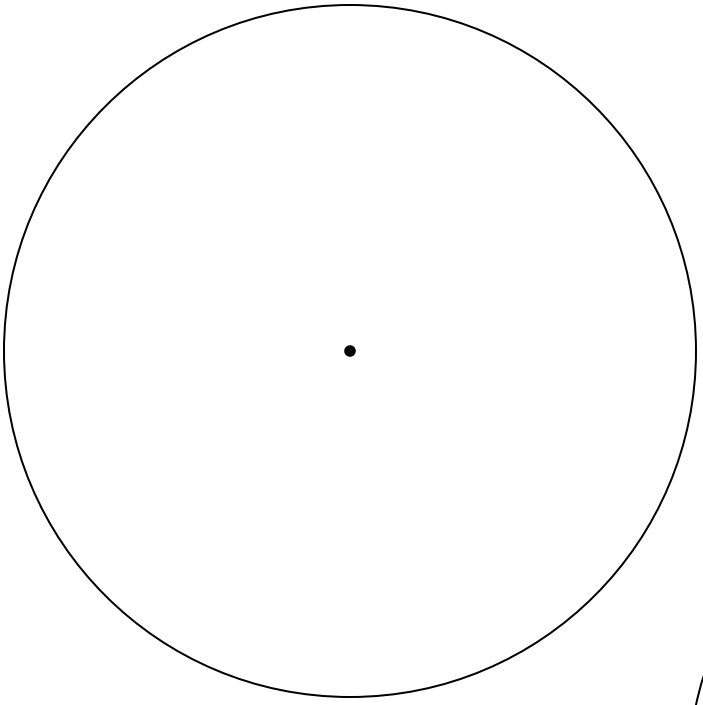
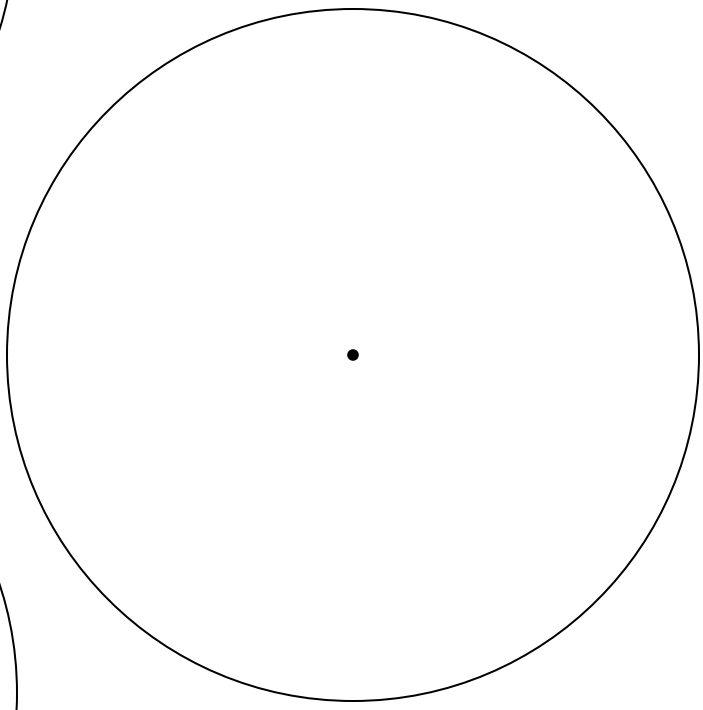
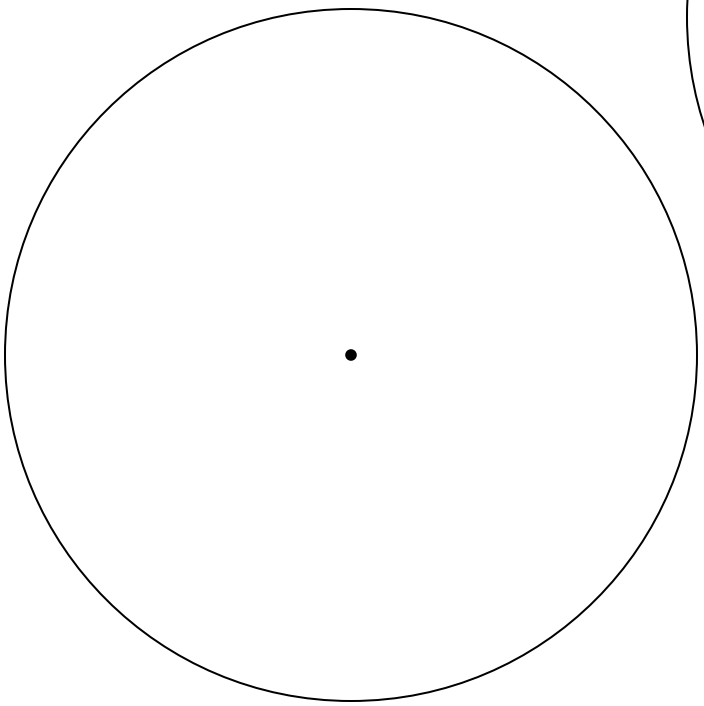






Name: _____ Date: _____

Lemonade
1 cup sugar
6 cups cold water
2 cups lemon juice

Hot Chocolate
2 one–ounce squares of sweetened chocolate
1 cup of water
4 cups of milk

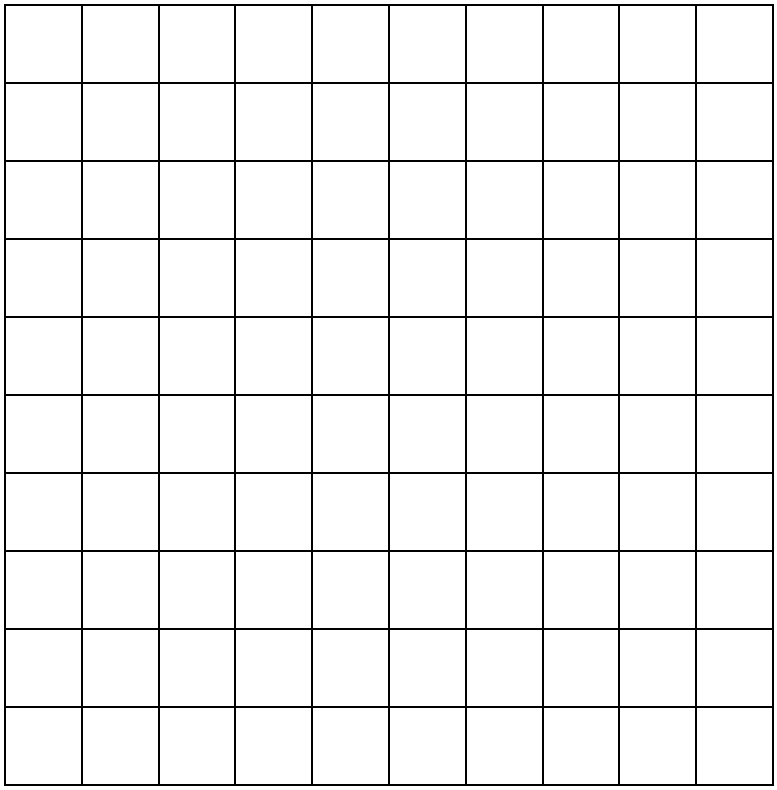
Burgers
1 pound of ground beef
2 tablespoons of green pepper
6 tablespoons of onions
3 tablespoons of catsup
1 teaspoon of salt
2 teaspoons of prepared mustard

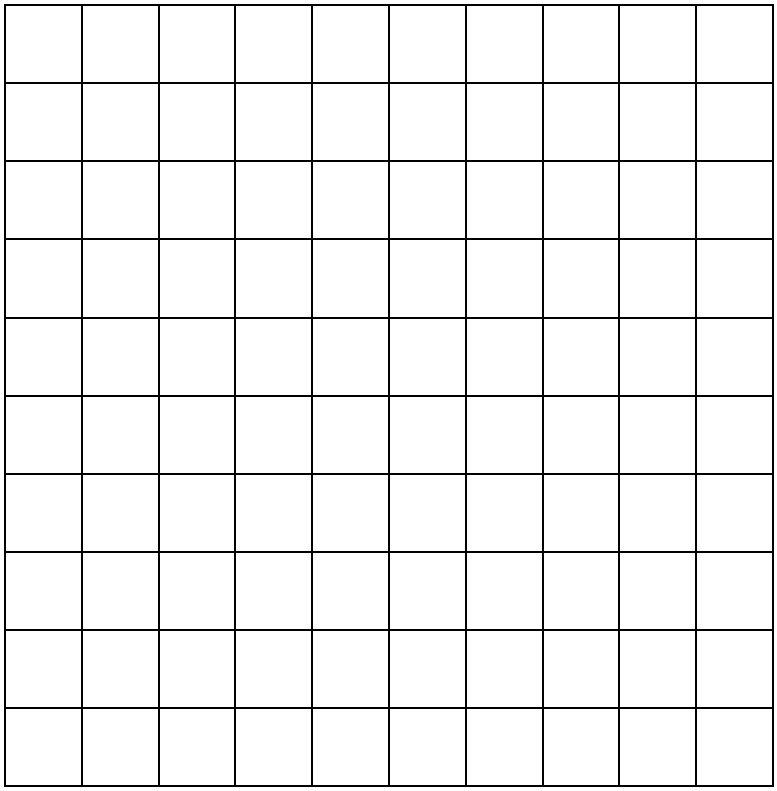
Grilled Cheese Sandwiches
2 slices of bread
1 slice of cheese
4 pats of butter

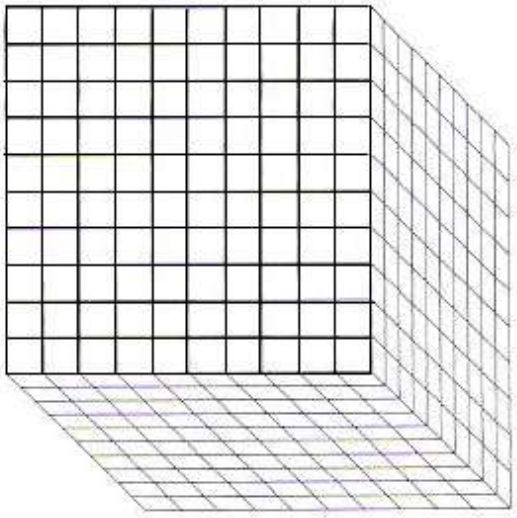
Caramel Snappers
144 pecan halves
36 caramels
1 cup of semisweet chocolate

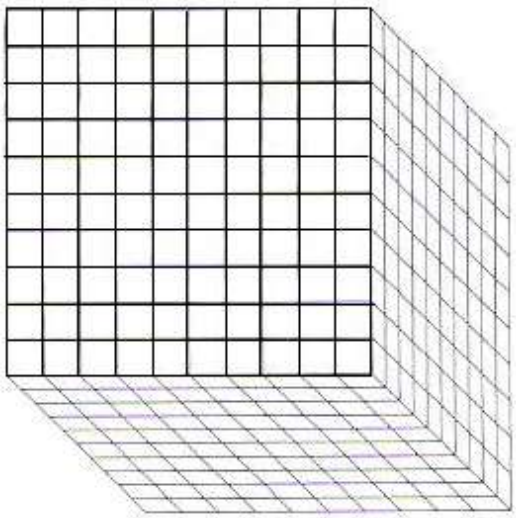
Easy Macaroons
16 ounces of shredded coconut
15 ounces of sweetened condensed milk
2 teaspoons of vanilla

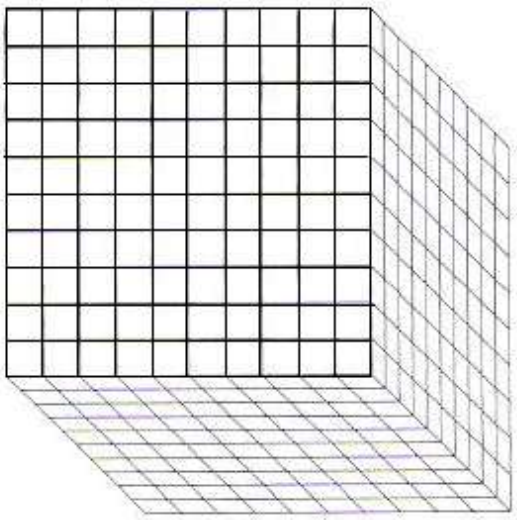
Name: _____ Date: _____

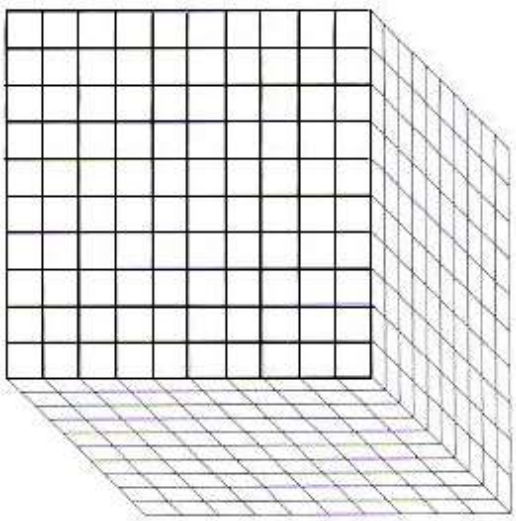








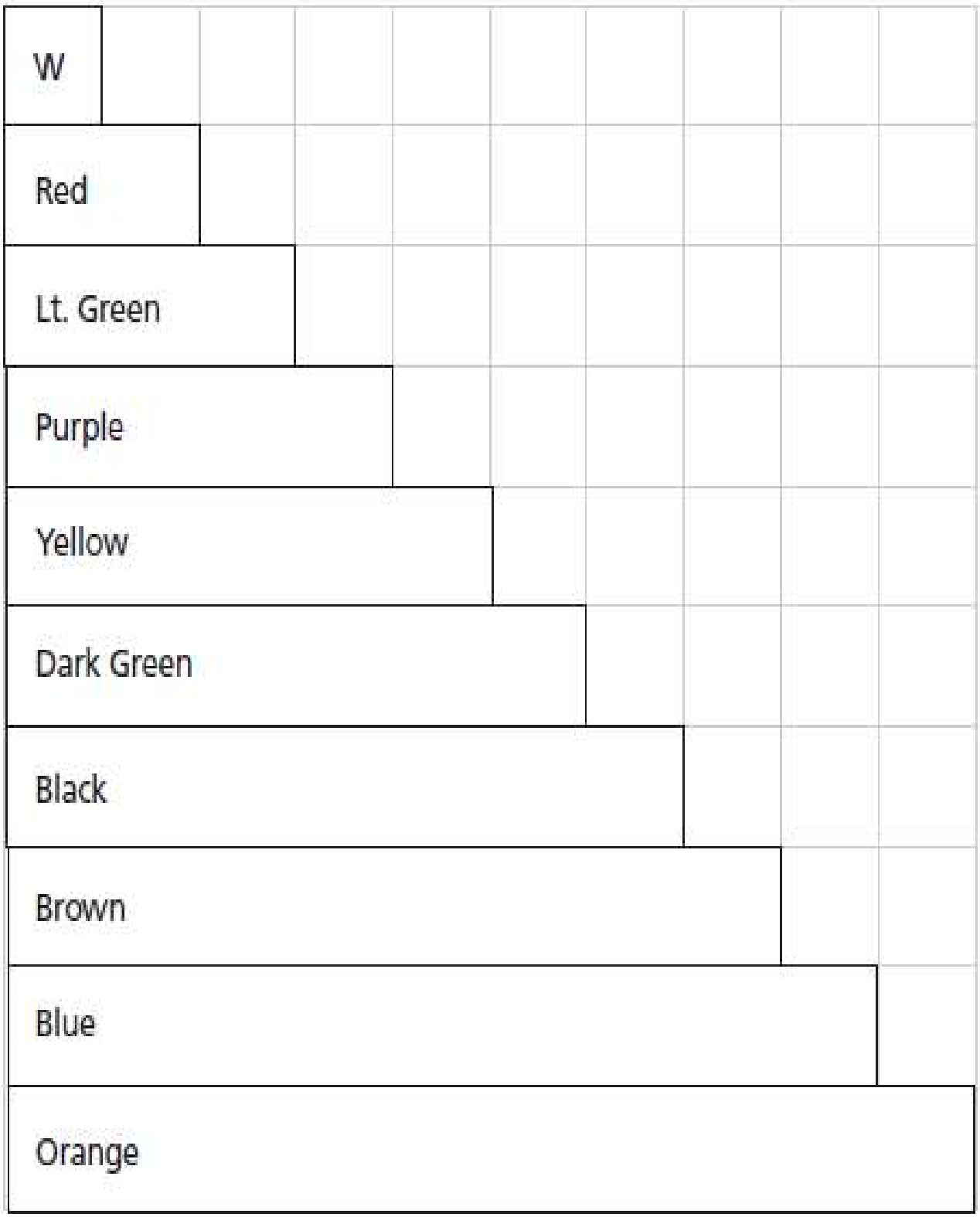




Unit 4, Activity 12, Place Value Chart with Decimals

Name: _____ Date: _____

Ones			•	**Decimals**		
hundreds	tens	ones	•	tenths	hundredths	thousandths


W
Red
Lt. Green
Purple
Yellow
Dark Green
Black
Brown
Blue
Orange

Name: _____ Date: _____

Process Guide: Exploring Fractions with Cuisenaire Rods

1. **Explore**: Arrange the rods in order of length. What do you notice about the "staircase" created?

2. **Examine**: Complete the following questions. Answer the "How do you know?" section in complete sentences.

    a. Begin with the orange rod. Which rod is ½ of the orange rod? _____
    How do you know?

    b. Which rod is 1/5 of the orange rod? _____
    How do you know?

    c. Which rod is 1/10 of the orange rod? _____
    How do you know?

    d. Now use the brown rod. Which rod is ½ of the brown rod? _____
    How do you know?

    e. Which rod is ¼ of the brown rod? _____
    How do you know?

f. Which rod is 1/8 of the brown rod? _____
How do you know?

3. **Reason and Compare:** Complete the following questions. Answer the "How do you know?" section in complete sentences.

a. Use the light green rod. If the light green rod is 1/3, which rod is the whole? _____
How do you know?

b. If the light green rod is 1/3, which rod is 2/3? _____
How do you know?

c. Use the white rod. If the white rod is 1/5, which rod is the whole? _____
How do you know?

d. If the white rod is 1/5, which rod is 2/5? _____
How do you know?

e. Use the dark green rod. If the dark green rod is 3/4, which rod is the whole? _____
How do you know?

f. If the dark green rod is 2/3, which rod is the whole? _____
How do you know?

Name: _____ Date: _____

Process Guide: Exploring Fractions with Cuisenaire Rods *(These answers are sample answers using the white rod as the basis for equivalency)*

1. **Explore**: Arrange the rods in order of length. What do you notice about the "staircase" created?
   When the rods are arranged in order of length each rod differs from the next by 1 white rod. (1 centimeter)

2. **Examine**: Complete the following questions. Answer the "How do you know?" section in complete sentences.

   a. Begin with the orange rod. Which rod is ½ of the orange rod? *Yellow*
      How do you know?
   The orange rod is equal to 10 white rods. The yellow is equal to 5 white rods. 5 is ½ of 10. Therefore, the yellow rod is ½ of the orange rod.

   b. Which rod is 1/5 of the orange rod? *Red*
      How do you know?
   The orange rod is equal to 10 white rods. The red rod is equal to 2 white rods. 2 is 1/5 of 10 Therefore, the red rod is 1/5 of the orange rod.

   c. Which rod is 1/10 of the orange rod? *White*
      How do you know?
   Ten white rods are equal to 1 orange rod. Therefore, the white rod is 1/10 of the orange rod.

   d. Now use the brown rod. Which rod is ½ of the brown rod? *purple/pink*
      How do you know?
   8 white rods equal 1 brown rod. 4 white rods equal 1 purple/pink rod. 4 is ½ of ; therefore, the purple/pink rod is ½ of the brown rod.

   e. Which rod is ¼ of the brown rod? *Red*
      How do you know?
   1 brown rod is equal to 8 white rods. 1 red rod is equal to 2 white rods. 2 is 1/4 of 8. Therefore, the red rod is 1/4 of the brown rod.

   f. Which rod is 1/8 of the brown rod? *White*
      How do you know?
   Eight white rods are equal to 1 brown rod. Therefore, 1 white rod is 1/8 of the brown rod.

3. **Reason and Compare:** Complete the following questions. Answer the "How do you know?" section in complete sentences.

    a. Use the light green rod. If the light green rod is 1/3 of the whole, which rod is the whole? *Blue*
    How do you know?
3 light green rods equal 1 blue rod.

    b. If the light green rod is 1/3 of the whole, which rod is 2/3? *Dark green*
    How do you know?
9 white rods would be the whole. 3 white rods are equal to 1 light green rod. 2 light green rods are equal to 1 dark green rod. 1 dark green rod is equal to 6 white rods. 6 is 2/3 of 9; therefore 1 dark green rod is equal to 2/3.

    c. Use the white rod. If the white rod is 1/5 of the whole, which rod is the whole? *Yellow*
    How do you know?
5 white rods are equal to 1 yellow rod.

    d. If the white rod is 1/5 of the whole, which rod is 2/5? *Red*
    How do you know?
5 white rods would be the whole. 1 red rod is equal to 2 white rods. 1 red rod is also equal to 2/5.

    e. Use the dark green rod. If the dark green rod is ¾ of the whole, which rod is the whole? *Brown*
    How do you know?
1 dark green rod is equal to 6 white rods. 6 is ¾ of 8. 8 white rods are equal to 1 brown rod.

    f. If the dark green rod is 2/3, which rod is the whole? *Blue*
    How do you know?
1 dark green rod is equal to 6 white rods. 6 is 2/3 of 9. 1 blue rod is equal to 9.

Unit 4, Activity 16, How Big is the Fraction?

Name: _____ Date: _____

= 0	Between 0 and $\frac{1}{2}$	$=\frac{1}{2}$	Between $\frac{1}{2}$ and 1	= 1	Between 1 and 2