

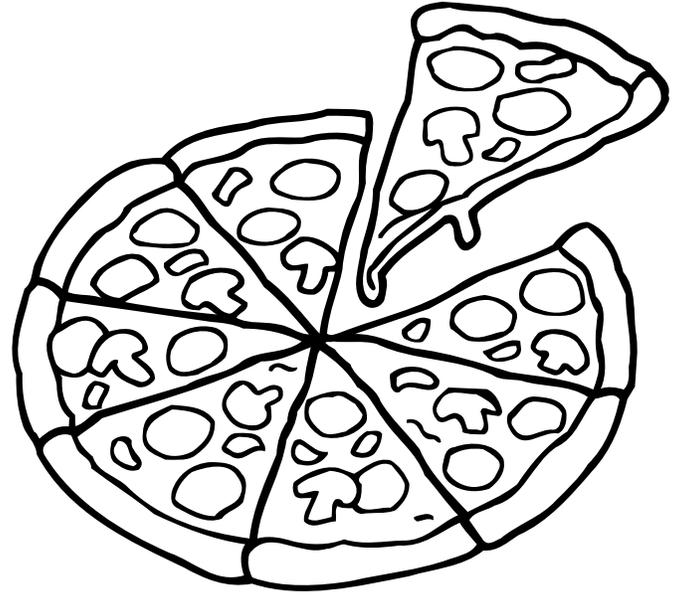
Equivalent Fraction Activities

3rd–5th Grade

Objectives

Number & Operations - Fractions

- Understanding fractions as equivalent if they are the same size or same point on a number line
- Recognizing and generating equivalent fractions, and explaining why the fractions are equivalent using a visual model



Materials Needed

- Whiteboard
- Fraction pizzas reproducibles
- Fraction bars reproducible
- Crayons
- Chart paper
- “Fraction Contraption” game mats
- “Fraction Contraption” game pieces
- Spinner template
- Pencils
- Paper clips
- Scissors
- Tape

Preparation

Print out the fraction pizzas reproducibles and make an enlarged copy of each pizza. Cut out the three pizzas and tape them to the board.

Introduction

On the board, write:

5 dimes are equivalent to 2 quarters.

$3 + 5$ is equivalent to $5 + 3$.

$1/2$ is equivalent to 50%.

Read the sentences aloud. Then ask students to discuss what they think the term “equivalent” means.

Procedure

1. Explain to students that you will be teaching them about equivalent fractions, or fractions that are equal in value.
2. Invite three student volunteers to come to the board. Have each student stand next to one of the pizzas. Then give each student a crayon.
3. Explain that the volunteers will color a fraction of the pizzas to show how much they ate. Ask the first volunteer to color $1/4$ of the pizza that has four slices, the second to color $2/8$ of the pizza that has eight slices and the third to color $3/12$ of the pizza that has 12 slices.

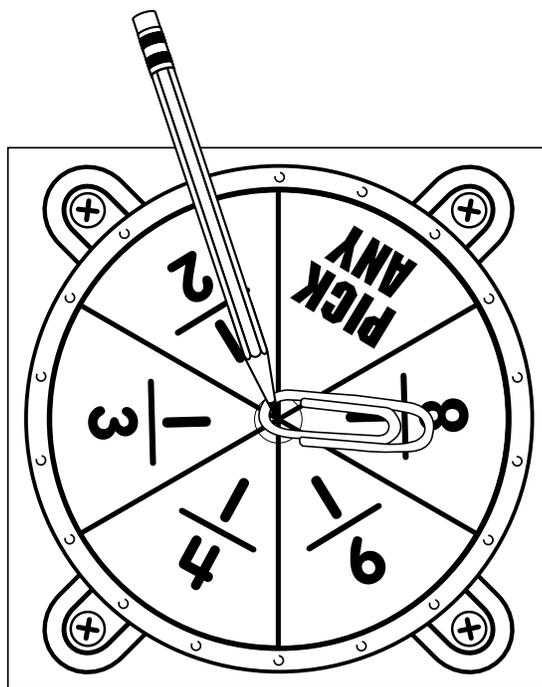
- Prompt the class to compare the shaded portions of the three pizzas and talk about what they observe. Guide students to understand that the shaded portions are equivalent. Then point out that the unshaded portions are also equivalent. Write the equivalent fractions on the board or chart paper ($1/4 = 2/8$, $1/4 = 3/12$, $2/8 = 3/12$).

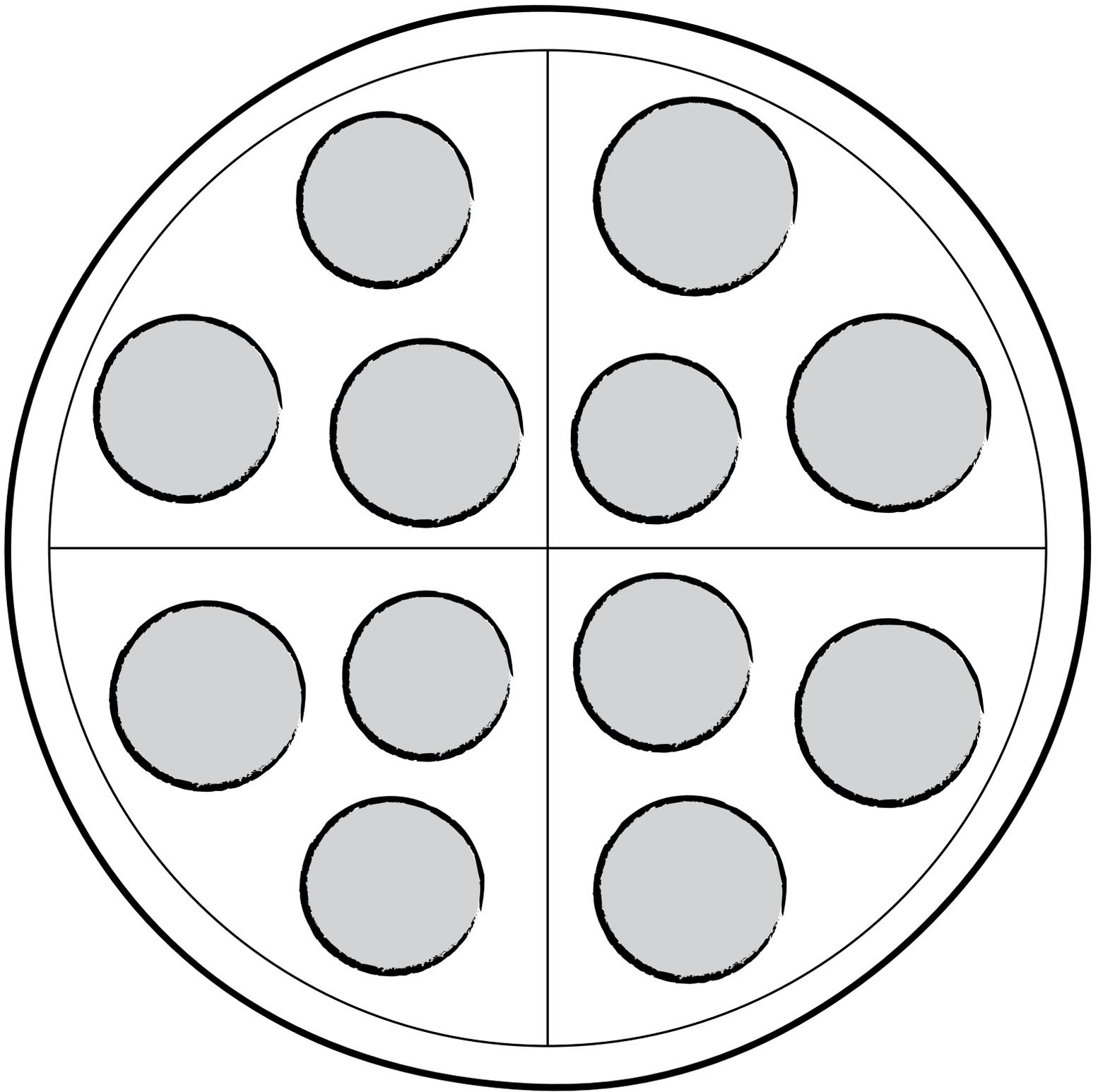
Guided Practice

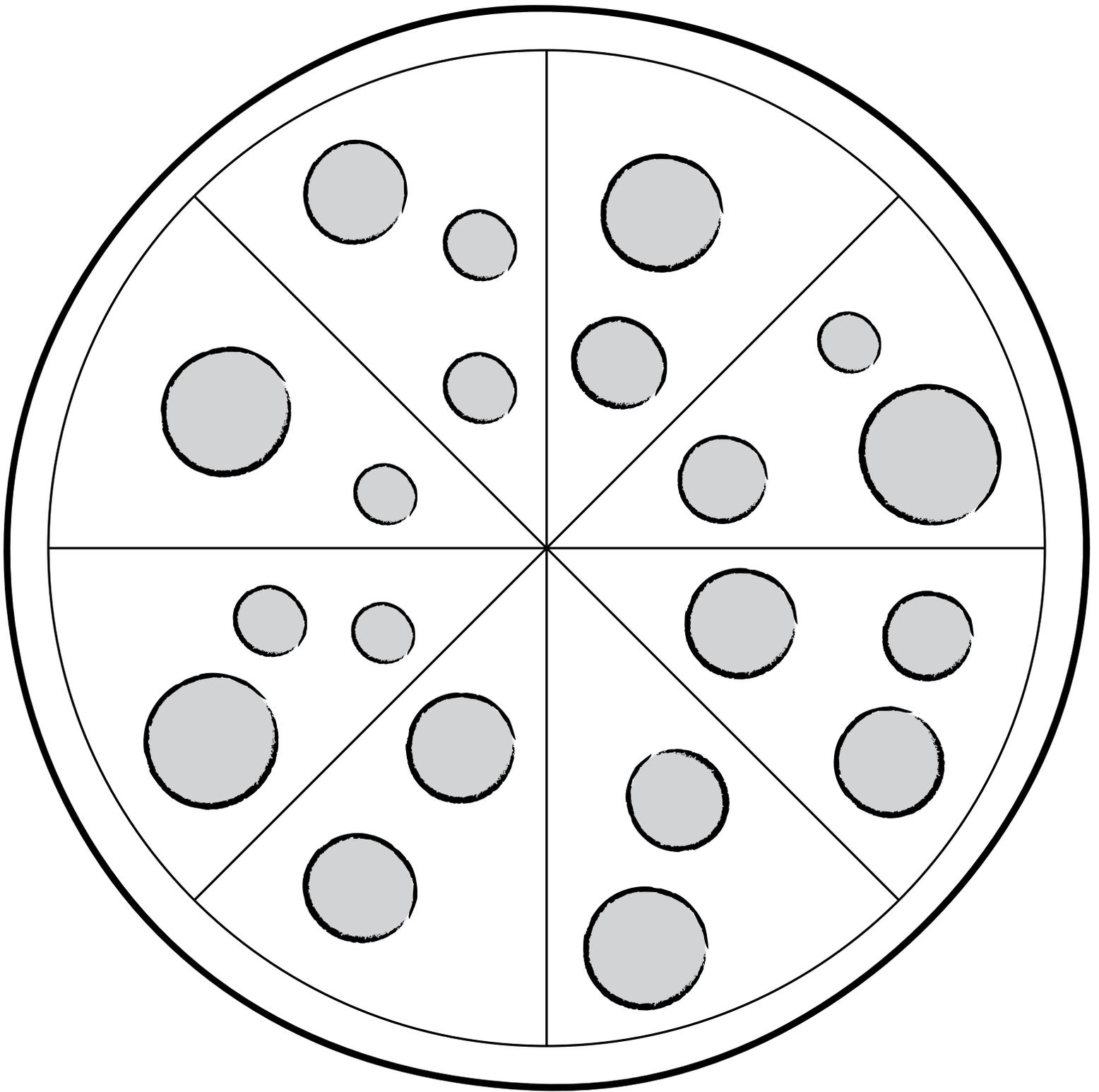
- Give each student a copy of the fraction bars reproducible. Have students color each row a different color and cut them out.
- Prompt students to use the fraction bars to find 10 equivalent fraction pairs.
- Write the equivalent fractions on chart paper as students discover them.
- Ask students to draw pictures representing two equivalent fractions. Post students' drawings on the chart paper.

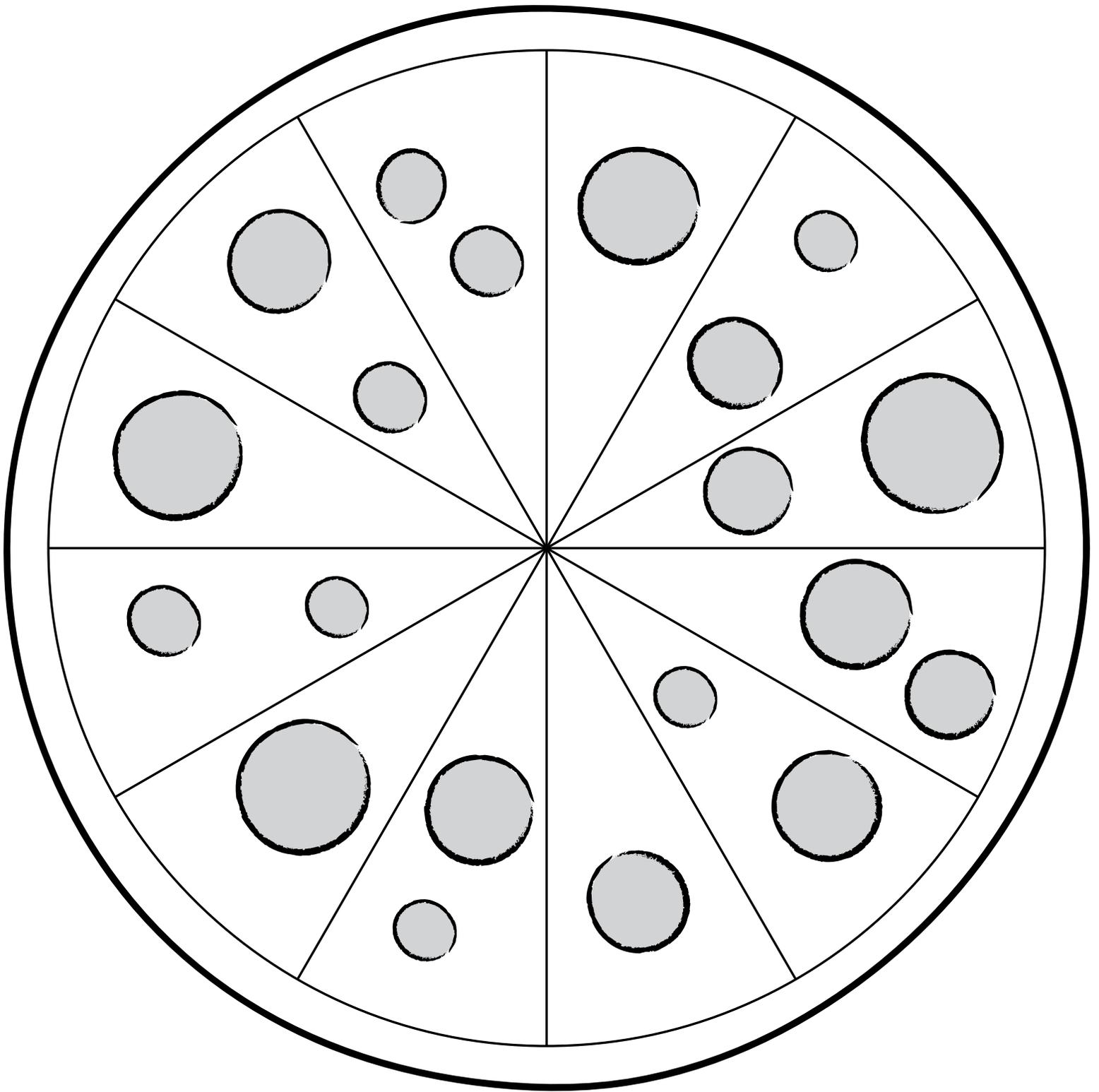
Independent Practice

- Divide students into pairs. Give each pair a copy of the "Fraction Contraption" game mats and the "Fraction Contraption" game pieces. Have students cut out the game pieces.
- Give each pair of students a spinner, a paper clip and a pencil. Show students how to use the paper clip as the arrow for the spinner: Take the paper clip and slide it onto the pencil. Then hold the pencil upright with the tip in the center of the spinner. Flick the paper clip to make it spin around the pencil.
- Students take turns spinning the paper clip to select a fraction. Have player 1 spin the spinner and look at the fractions on her mat. If she can use the fraction she just spun to fill in a space on any circle on the right side of her mat, she can take the fraction piece and place it on her mat. (Spinning "Pick Any" allows students to choose any fraction piece.)
- When a student has built a fraction on the right that is equal to one on the left, he can write the numerator of that fraction on his mat.
- Play continues until one player fills in all three numerators on her mat.









$$\frac{1}{2}$$

$$\frac{1}{2}$$

$$\frac{1}{3}$$

$$\frac{1}{3}$$

$$\frac{1}{3}$$

$$\frac{1}{4}$$

$$\frac{1}{4}$$

$$\frac{1}{4}$$

$$\frac{1}{4}$$

$$\frac{1}{5}$$

$$\frac{1}{5}$$

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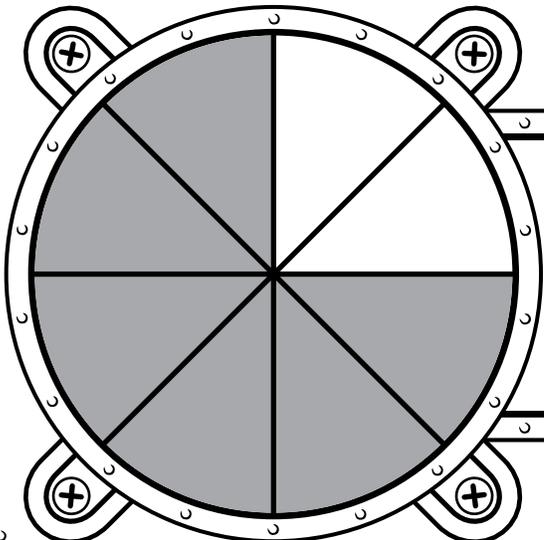
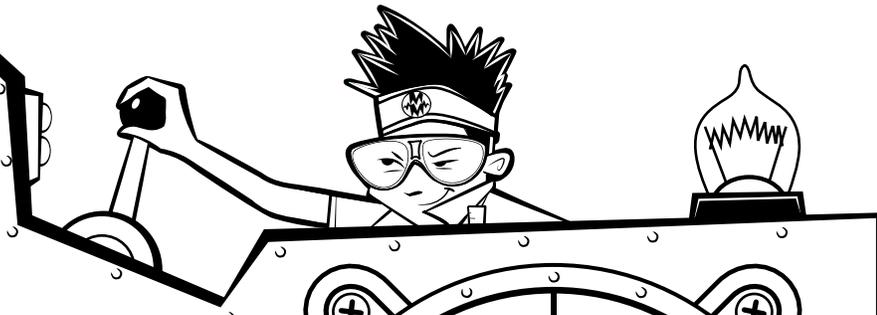
$$\frac{1}{8}$$

$$\frac{1}{8}$$

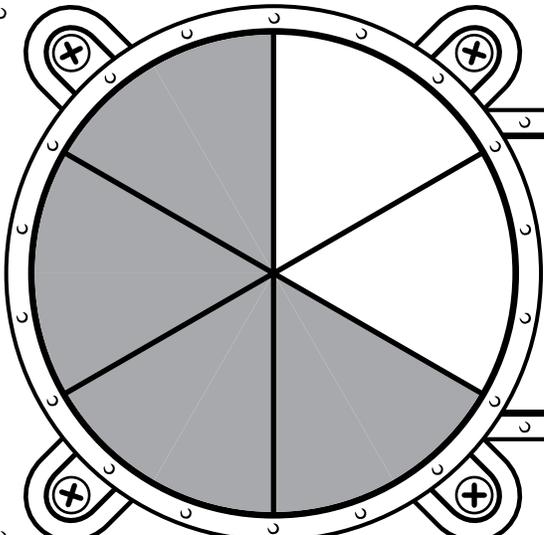
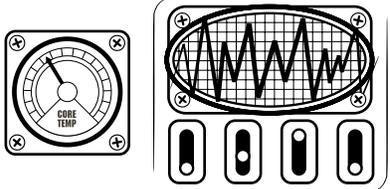
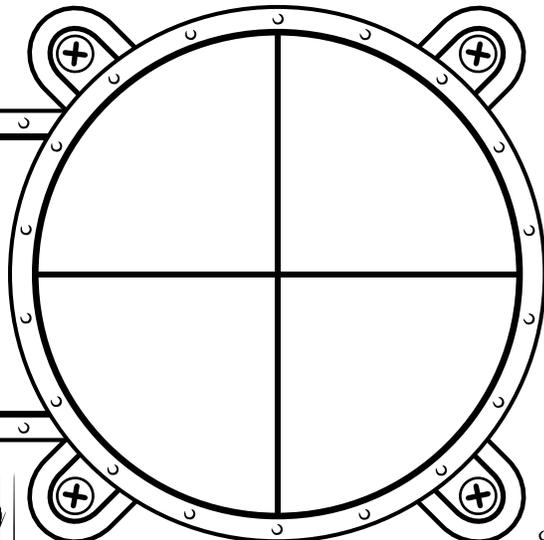
$$\frac{1}{10}$$

$$\frac{1}{12}$$

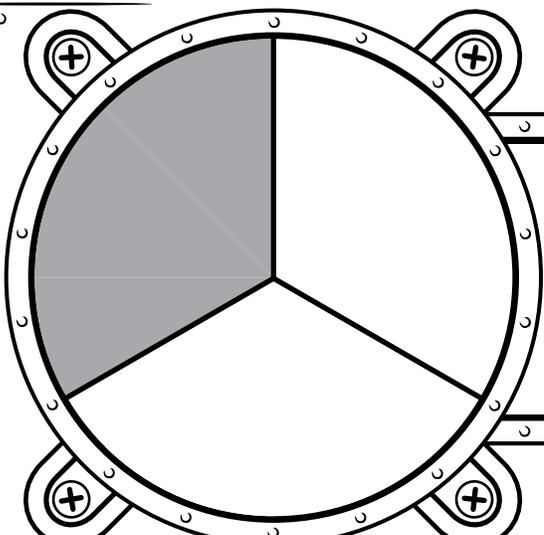
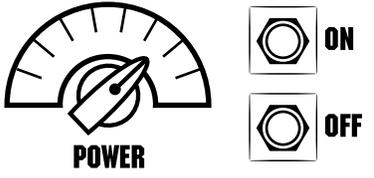
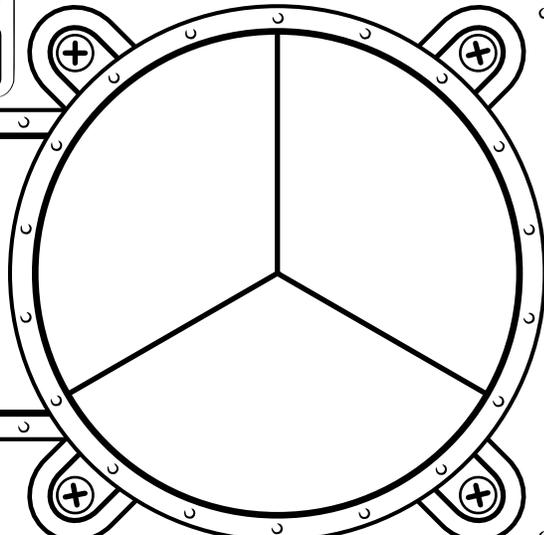
FRACTION CONTRAPTION



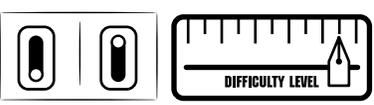
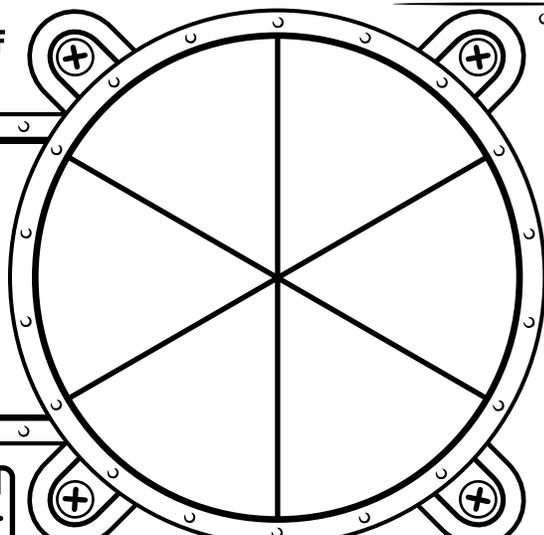
$$\frac{6}{8} = \frac{\square}{4}$$



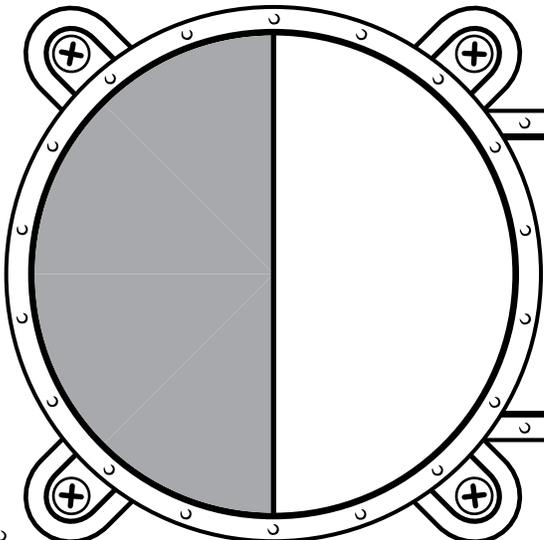
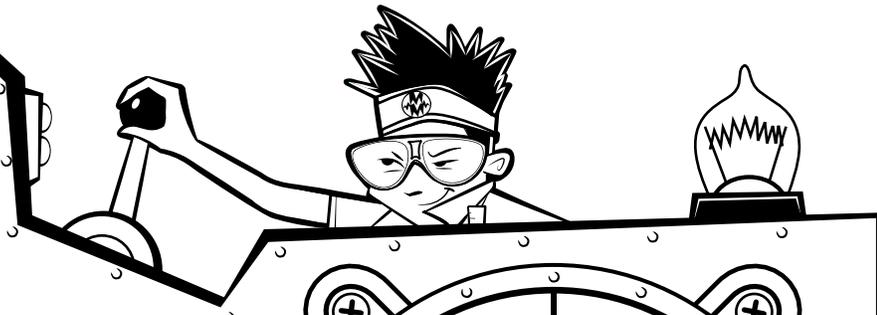
$$\frac{4}{6} = \frac{\square}{3}$$



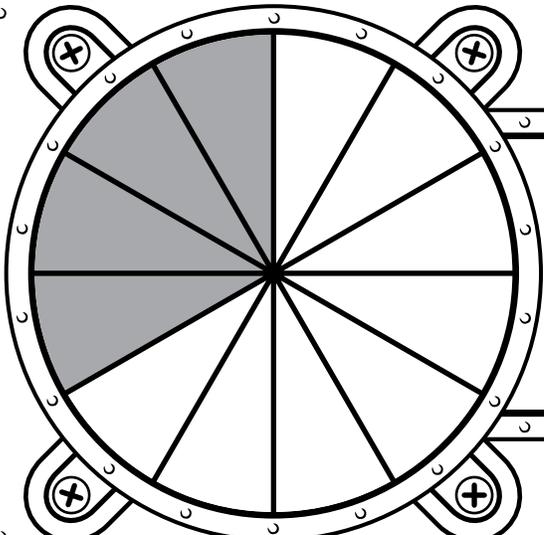
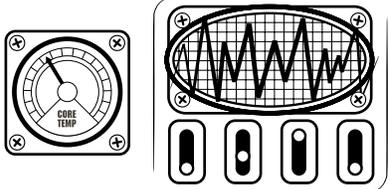
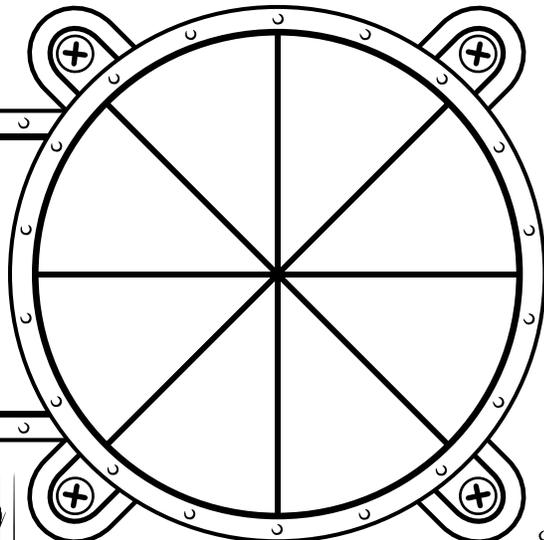
$$\frac{1}{3} = \frac{\square}{6}$$



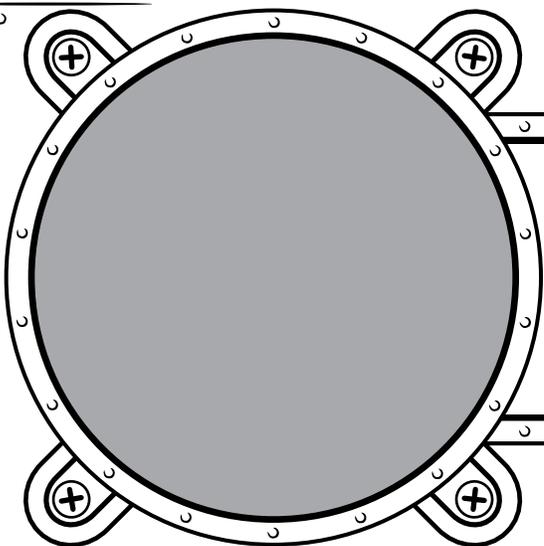
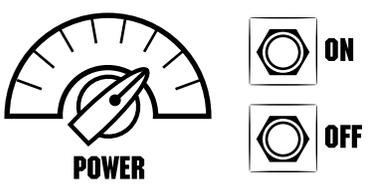
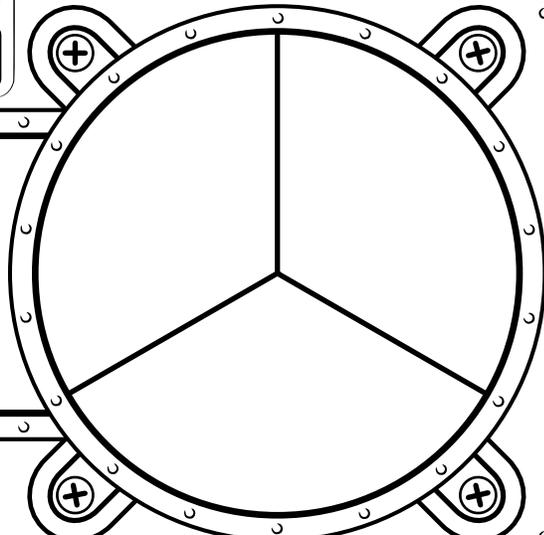
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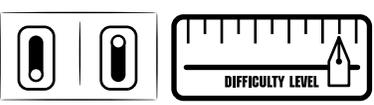
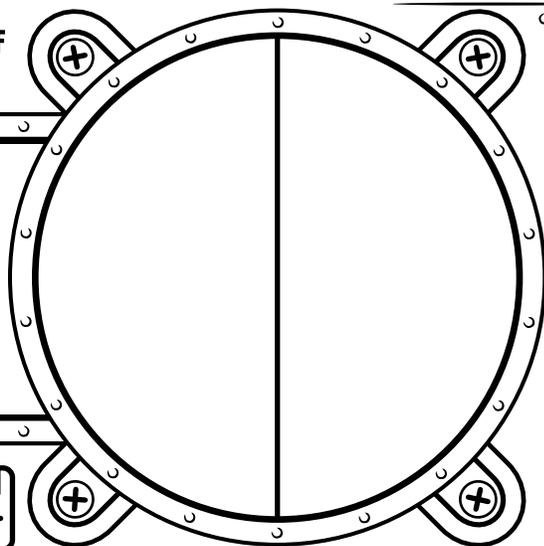
$$\frac{1}{2} = \frac{\square}{8}$$

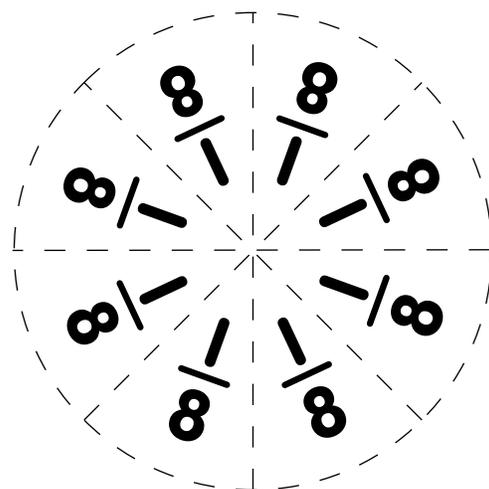
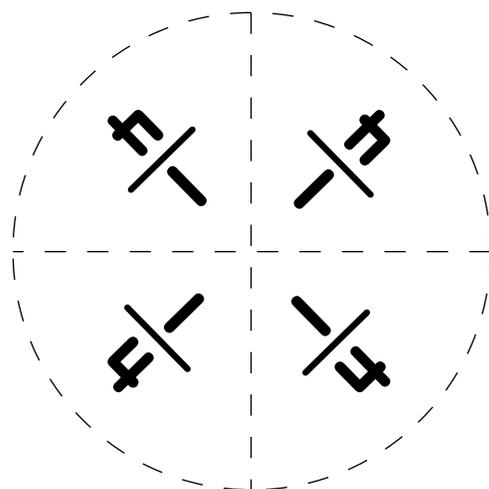
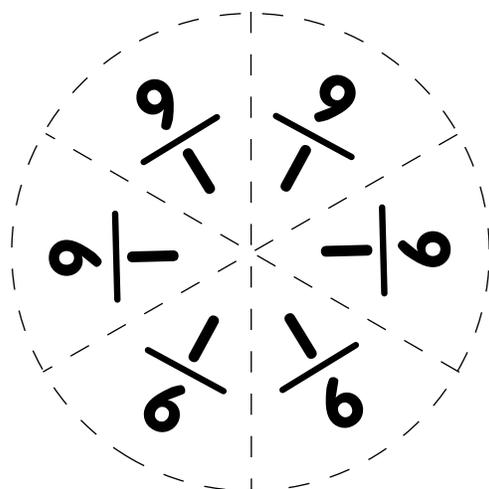
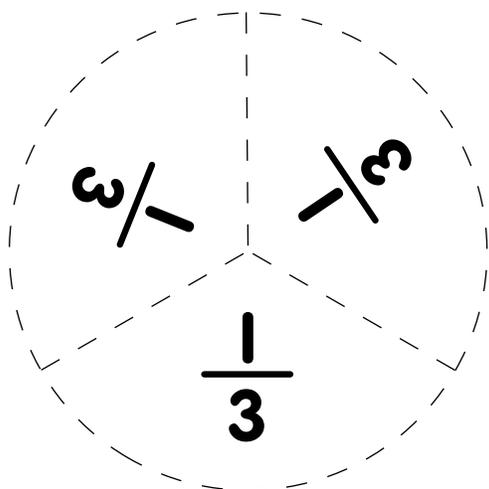
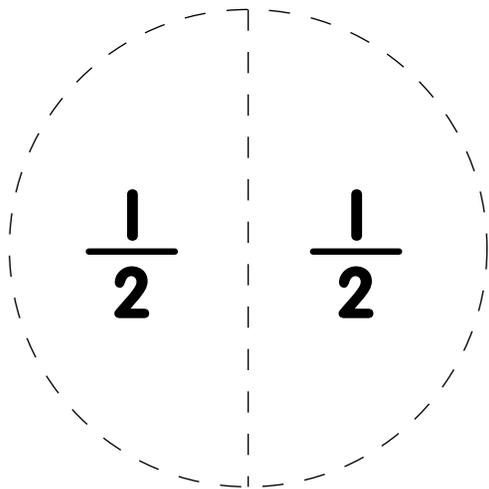


$$\frac{4}{12} = \frac{\square}{3}$$



$$1 = \frac{\square}{2}$$





FRACTION CONTRAPTION SPINNER

