Unit 2, Lesson 17

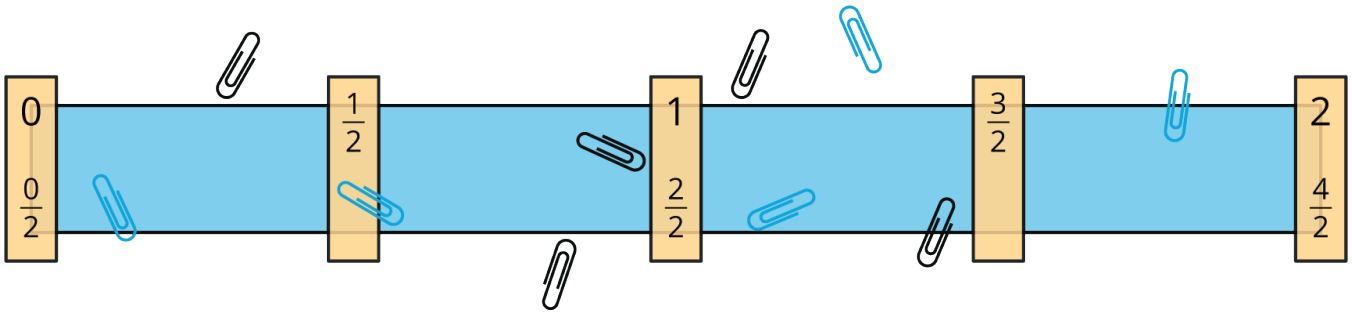
Paper Clip Games

Let's create a game about locating and comparing fractions on the number line.

Warm-up

Notice and Wonder: Lots of Paper Clips

What do you notice? What do you wonder?



Activity 1

Paper Clip Tossing Game

Let's prepare a gameboard and figure out how to toss paper clips and record the results.

1. Make your gameboard:
    - Fold your paper strip in half, then in half again.
    - Tape the paper strip to your workspace and label the benchmark fractions 0, $\frac{1}{2}$, 1, $\frac{3}{2}$, and 2.
2. Play the game:
    - Decide on which benchmark fraction you'll try to land. This is the target fraction.
    - Take turns tossing the paper clips.
    - Label the fraction where each paper clip lands.
    - If you land on the target fraction, name an equivalent fraction to get a point.
    - The player with the most points at the end of the game wins.

Be prepared to share your strategies for:

- tossing the paper clips
- finding out the fraction for each clip's location on the gameboard
- naming equivalent fractions for the target fractions

Activity 2

A New Game with New Rules

Invent your own game.

1. Make a list with the rules of your game. Your game should include at least one of the following:
   - comparing fractions
   - finding equivalent fractions
   - using common denominators
   - using benchmark fractions like $\frac{1}{2}$ or $\frac{2}{2}$
2. Play your game, paying close attention to the rules.
3. Revise and clarify your game rules, if necessary.

Activity 3

Field Test

Let's try out these games!

1. Before playing the game, exchange your game rules with another team. Carefully read the rules. Take turns asking clarifying questions, if you have any.
2. Play each other's games.
3. After playing the game, give feedback to each other about the rules.
    a. What is one thing you liked about the other team's game?

    b. What is one thing you might change?