

Comparing Fractions

Common Core Standard:

3.NF.A.3: Compare fractions with the same denominator.

Lesson:

Comparing Fractions: Understanding the Bigger and Smaller Parts

Objective:

Students will compare fractions with the same denominator using visual representations and real-life examples, such as portions in recipes or dividing objects. They will understand that the larger the numerator, the larger the fraction, when the denominators are the same.

Materials:

- Paper plates (or circles)
 - Fraction strips (or paper divided into equal parts)
 - Markers, crayons, or colored pencils
 - Scissors
 - Fraction worksheets (with visual representations)
 - Recipe cards with different ingredient portions (optional)
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Safety Precautions:

Ensure students use child-safe scissors and handle them with care. Encourage students to work carefully when cutting fraction strips or paper plates. Remind them to keep scissors away from their faces and to always ask for help when needed.

Procedures:

1. Introduction:

- Start by reviewing the concept of fractions. Explain that fractions represent parts of a whole, with the numerator showing how many parts are being considered, and the denominator showing how many equal parts the whole is divided into.
- Discuss how to compare fractions with the same denominator. Emphasize that when the denominators are the same, the fraction with the larger numerator is the greater fraction.

2. Hands-On Activity:

- Give each student a paper plate divided into equal sections (e.g., $1/4$, $1/2$, $3/4$) and a set of fraction strips.
- Ask students to color in the sections of their plates to represent different fractions. For example, if they are comparing $2/4$ and $3/4$, they should color in two sections of one plate and three sections of another plate.
- Have students cut out their fraction strips and place them next to their plates to compare fractions. For example, place a $1/4$ strip next to a $2/4$ plate to show how much bigger $2/4$ is than $1/4$.

3. Discussion:

- Have students compare fractions with the same denominator in small groups. They should explain to each other why one fraction is greater or smaller.
 - Ask students to explain how the numerators affect the size of the fraction when the denominators are the same.
4. **Real-World Application:**
- Provide students with recipe cards that show different ingredient portions (e.g., $\frac{1}{2}$ cup of sugar, $\frac{3}{4}$ cup of sugar). Ask students to compare the portions and determine which ingredient portion is larger.
 - Encourage students to discuss how fractions are used in real life, such as in recipes or sharing a pizza.
5. **Assessment:**
- Distribute a worksheet where students must compare fractions with the same denominator (e.g., $\frac{2}{5}$ vs. $\frac{4}{5}$, $\frac{3}{8}$ vs. $\frac{5}{8}$). Have students circle the larger fraction in each pair and explain their reasoning.

Note: Clean-Up

After completing the activity, students should return all materials to their designated places. Ensure that all fraction strips and paper plates are neatly stored. Encourage students to dispose of any scrap paper or leftover materials in the recycling bin and clean up their work areas. Check that all scissors are safely stored away.