

Title: Comparing Fractions	Grade: 4th Grade
Content: Math	Duration: 15-20 minutes, or daily for one week

Standard:

- **4.NF.2:** Compare two fractions with different numerators and different denominators

Objective:
Students will divide objects from around their house into fractions in order to compare the two fractions.

Materials:

- Two same rectangular objects
- Paper and pencils

Introduction Description:
Students can explore fractions with almost any object found around the home. Fractions can be found when cooking, in recipes, and within many jobs around the world. This activity will allow students to explore the explanation on how to compare fractions that have unlike numerators and denominators

Vocabulary

- Numerator- top number on fraction $2/4$
 - In $2/4$ the “2” is the numerator
- Denominator- bottom number on a fraction
 - In $2/4$ the “4” is the denominator
- $>$ Greater than
 - Example $56 > 14$
- $<$ Less than
 - Example: $14 < 56$
- =Equal to
 - Example: $56 = 56$

Steps:

- Find two rectangular objects that are about the same length.
 - Examples:
 - Celery cut the same length
 - String Cheese
 - Granola bars
 - Candy bars
- Cut the first rectangle into 4 equal parts. Each one of those parts will equal $1/4$ of the object.
- Cut the second rectangle object into 8 equal parts. Each one of those parts will equal $1/8$ of the object.



- Now compare $\frac{3}{4}$ (three of the $\frac{1}{4}$ pieces) and $\frac{7}{8}$ (7 of the $\frac{1}{8}$ pieces)
 - Which fraction is bigger $\frac{3}{4}$ or $\frac{7}{8}$?
 - The numerators are different? Can you make a prediction based on the numerators which fraction will be bigger?
 - The denominators are different. Can you make a prediction based on the denominators which fraction is bigger?
 - $\frac{7}{8}$ is bigger than the $\frac{3}{4}$
 - So $\frac{7}{8}$ is greater than $\frac{3}{4}$ or $\frac{7}{8} > \frac{3}{4}$
 - Another way to write this is $\frac{3}{4}$ is less than $\frac{7}{8}$ or $\frac{3}{4} < \frac{7}{8}$



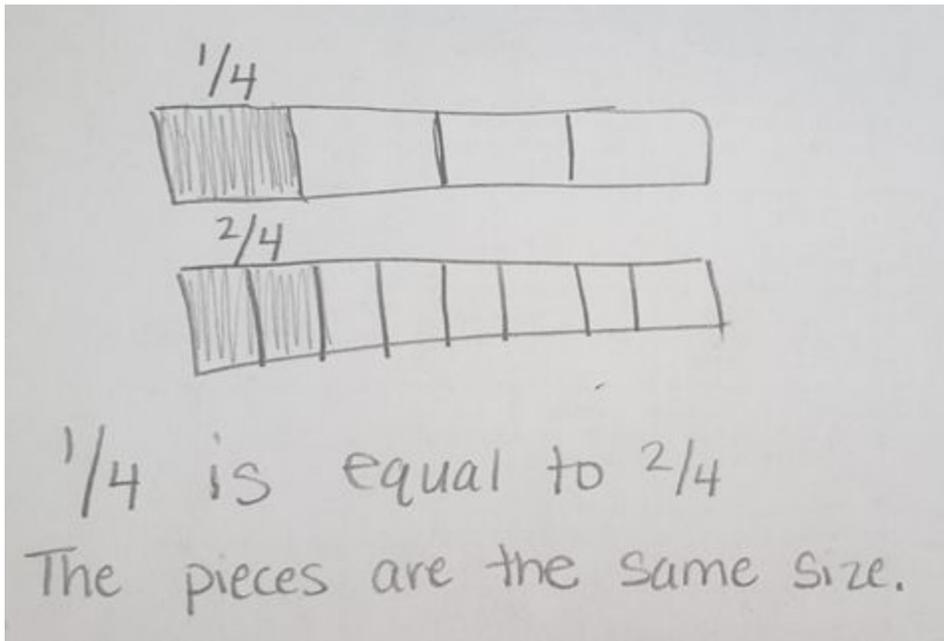
- Try comparing the fractions $\frac{2}{4}$ (two of the $\frac{1}{4}$ pieces) and $\frac{4}{8}$ (four of the $\frac{1}{8}$ pieces)
 - Which fraction is bigger?
 - $\frac{2}{4}$ and $\frac{4}{8}$ are the same size.
 - That would make them equal.
 - So, $\frac{2}{4}$ is equal to $\frac{4}{8}$ or $\frac{2}{4} = \frac{4}{8}$
 - Come up with your own fraction comparisons. Explain the comparisons to another person. Pick one of your fraction comparisons to draw out or take a picture. Then write the fraction comparison by using $>$, $<$, or $=$.

Examples:

$\frac{2}{3}$ is greater than $\frac{2}{4}$ or $\frac{2}{3} > \frac{2}{4}$

I can also write the fraction as $\frac{2}{4}$ is less than $\frac{2}{3}$ or $\frac{2}{4} < \frac{2}{3}$





Adaptations (optional):

- Use the fraction bars below
- Try doing it with circular objects
- Draw out pictures or take pictures
- Each day students can explore different fraction comparisons

Finished Product:

A drawing or picture of your fractions comparisons with written comparison sentences. Use the $<$, $>$, $=$ when comparing the fractions.