

<b>Title:</b> Comparing Fractions	<b>Grade:</b> 3rd Grade
<b>Content:</b> Math	<b>Duration:</b> 15-20 minutes, or daily for one week

**Standard:**

- **3.NF.2:** Compare two fractions with the same numerator and different denominators

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

**Materials:**

- 2 rectangular objects that are the same
- 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 the same numerators and different denominators.

**Vocabulary**

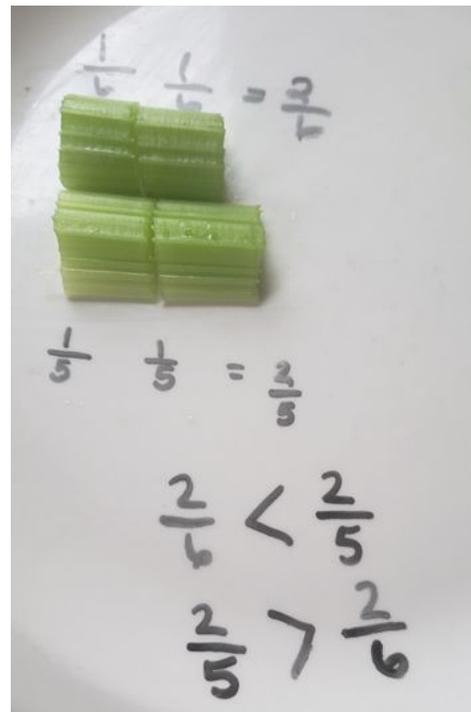
- Numerator- top number on fraction  $\frac{2}{4}$ 
  - In  $\frac{2}{4}$  the “2” is the numerator
- Denominator- bottom number on a fraction
  - In  $\frac{2}{4}$  the “4” is the denominator
- > Greater than
  - Example  $56 > 14$
- < Less than
  - Example:  $14 < 56$
- =Equal to
  - Example:  $56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

**Steps:**  
 Students will compare the fractions  $\frac{2}{6}$  and  $\frac{2}{5}$ .

- 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 6 equal parts. Each one of those parts will equal  $\frac{1}{6}$  of the whole object.
- Cut the second rectangle object into 5 equal parts. Each one of those parts will equal  $\frac{1}{5}$  of the object.



- Take two  $\frac{1}{6}$  pieces. This will equal  $\frac{2}{6}$  of the whole object.
- Take two  $\frac{1}{5}$  pieces. This will equal  $\frac{2}{5}$  of the whole object.
  - Make a prediction. Which fraction is bigger? Which is smaller?
- Line the  $\frac{2}{6}$  pieces and the  $\frac{2}{5}$  to compare sizes.
  - Which piece is bigger?
- You will notice that the two  $\frac{1}{5}$  pieces that represent  $\frac{2}{5}$  are bigger than the two  $\frac{1}{6}$  pieces that represent  $\frac{2}{6}$ .
- So  $\frac{2}{6}$  is less than  $\frac{2}{5}$ .
  - $\frac{2}{6} < \frac{2}{5}$
  - Can you think of another way to write the sentence.
    - $\frac{2}{5}$  is greater than  $\frac{2}{6}$ 
      - $\frac{2}{5} > \frac{2}{6}$
- Talk with someone working with you how you could figure out the smaller piece without having to cut up the objects.
  - The  $\frac{2}{6}$  pieces needed to be divided up into more parts which would make it smaller.
- Try this again with using different denominators. Remember to keep the numerators the same. So you can try  $\frac{5}{8}$  and  $\frac{5}{10}$  or  $\frac{3}{5}$  and  $\frac{3}{6}$ .
- Once you compare the fractions, write the results using  $>$ ,  $<$ ,  $=$  and quick reason it is a true statement.



#### 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.

#### Examples:

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

$\frac{2}{3} > \frac{2}{4}$

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

$\frac{2}{4} < \frac{2}{3}$

$\frac{2}{4}$  is smaller pieces because I cut the string cheese into smaller pieces in order to get 4 pieces.



$$\frac{3}{8}$$

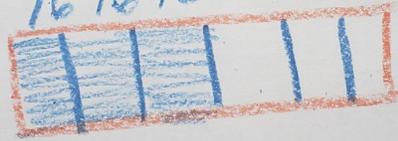
$\frac{1}{8} \frac{1}{8} \frac{1}{8}$



- This is cut up into more smaller pieces

$$\frac{3}{6}$$

$\frac{1}{6} \frac{1}{6} \frac{1}{6}$



- This is cut up into bigger pieces

$\frac{3}{8}$  is smaller than  $\frac{3}{6}$

$$\frac{3}{8} < \frac{3}{6}$$

ct:

