

Algebra/Geometry Institute Summer 2008

Compare Fractions Using Fraction Circles

Faculty Name: Jalisha Cross

School: Robinsonville Elementary School

Grade Level: 4



1 Teaching objective(s)

- a. Order and compare fractions with denominators of 12 or less.
- b. Identify, draw, and model equivalent fractions with denominators up to twelve.

2 Instructional Activities

a. The teacher will review identifying the numerator and denominator of a fraction with students. The teacher will draw a triangle on the board and separate it into 3 sections. The teacher will shade in 2 of the 3 sections of the triangle. The teacher will ask the students how many parts are shaded and how many total parts there are in all. The teacher will have the students tell what the number of parts shaded represents (numerator) and what the total parts or whole represent (denominator). The teacher will do a few more examples with the students. The teacher will then divide the students into groups of 3 (the teacher will count students off into groups by 1, 2, 3, etc.). The teacher will explain to students that they will be given a set of green and blue blocks to create representations of the 5 fractions written on the board (attachment 1). For example, the fraction $\frac{2}{3}$ may be shown using 2 green blocks and 1 blue block because $\frac{2}{3}$ of the whole set of three blocks is green. The teacher will walk around to check for student understanding. The teacher will ask students at the end of the activity to put the blocks back in the containers. The blocks will be collected by 2 students.

b. The teacher will then tell the students that next we will be comparing fractions to see which are larger, smaller, or equal. The teacher will give each group a set of fraction circles. The teacher will tell students to work in their group to find fractions that are equal. After time has been given, the teacher will have groups tell which fractions they found that were equivalents. The teacher will write 8 pairs of fractions on a transparency (attachment 2). The teacher will have students write the fractions on paper. The teacher will tell students that they will compare the fractions to find if they are equal or which fraction is larger or smaller. The teacher will tell the students that they will use their fraction circles

to help them find the answer. The teacher will walk around to assist students if needed and to observe the students' work.

3 Materials and Resources

Manipulative blocks or manipulatives of at least 2 colors

Transparency

Overhead Projector

White board

Transparency markers

Dry erase markers

Fraction circles

Text book (Houghton Mifflin, 4th Grade Edition)

Mississippi MCT2 Gold Edition, 4. New York: Triumph Learning, 2008. Pgs 52-58.

Paper

Pencils

4 Assessment

- a. The teacher will check students' work by observation.
- b. The teacher will grade papers on comparing fractions (attachment 2), checking for at least 70% correctness.

Attachment 1

1. $\frac{3}{6}$
2. $\frac{1}{4}$
3. $\frac{2}{5}$
4. $\frac{4}{5}$
5. $\frac{7}{8}$

Attachment 2

Name _____

1. $\frac{1}{2}$ _____ $\frac{3}{4}$

2. $\frac{1}{6}$ _____ $\frac{2}{3}$

3. $\frac{3}{4}$ _____ $\frac{2}{3}$

4. $\frac{2}{3}$ _____ $\frac{2}{9}$

5. $\frac{6}{8}$ _____ $\frac{2}{4}$

6. $\frac{3}{4}$ _____ $\frac{1}{8}$

7. $\frac{1}{3}$ _____ $\frac{5}{8}$

8. $\frac{3}{10}$ _____ $\frac{6}{12}$