

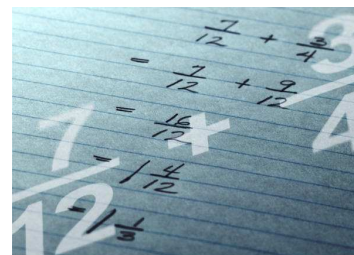
Algebra/Geometry Institute Summer 2008

-Sweet Fraction Frenzy-

Faculty Name: Krystaline Sample-Young

School: Carver Upper, Indianola, Mississippi

Grade Level: 4th



1. Teaching Objective(s)

- The students will compare and order fractions.

2. Instructional Activities

- a. Morning Math: "Draw 4 squares on your paper. Make all squares the same size. Label the squares as Square A, Square B, Square C, and Square D. Use lines to divide Square A into halves; divide Square B into thirds; divide Square C into fourths; and Square D into eighths."
- b. Allow a few students to show their representations of each divided square. Pass out construction paper strips to each student (see "Materials and Resources" for details). Say, "We are going to pretend that these construction strips are candy bars. We will use these candy bars to compare, order, find equivalences of, add, and subtract fractions."
- c. Activity.

i. Activity I: Whole-Group Instruction

1. Say, "Are all the strips the same size? (Allow students to answer this and other questions.) How do you know? If I eat the blue candy bar myself, I would say that I ate one whole candy bar. I am going to share the red candy bar with (child's name). When we share something, each person will have an equal piece. How many pieces will I need? How should I fold my candy bar to show two equal parts? (Demonstrate how to fold strips in hamburger style.) I am going to share the yellow candy bar with (1st child), (2nd child), and (3rd child). Each person will need an equal piece. How many people will share the candy bar? How should I fold my candy bar to show four equal parts? I am going to share the white candy bar with (1st child), (2nd child), (3rd child), (4th child), (5th child), (6th child), and (7th child).

child). Each person will need an equal piece. How many people will share the candy bar? How should I fold my candy bar to show eight equal parts? I am going to share the green candy bar with (1st child) and (2nd child). Each person will need an equal piece. How many people will share the candy bar? How should I fold my candy bar to show three equal parts?"

ii. Activity II: Identifying Fractions

1. Using the overhead, instruct students to take each folded strip and label how much each piece represents. (For example, each red piece represents $\frac{1}{2}$, each white piece represents $\frac{1}{8}$.)
2. After students have completed labeling each piece, they can now carefully cut apart their candy bar pieces.

iii. Activity III: Comparing & Ordering Fractions

1. Instruct students to take one piece of each color. Say, "Put these pieces in order from largest to smallest. Which piece is the largest? (Allow students time to respond.) Which piece will be next? Which piece will be next? Put the last two pieces in order. What do you notice about the pieces?"
2. Instruct students to model and answer questions 1-4. Call on students to answer and model questions 1-4.

3. Materials and Resources

- i. Materials
 - ii. Construction Paper Strips (a set of 5 strips which are pre-cut for each child – blue, red, yellow, white, and green)
 - iii. Scissors
 - iv. Markers – 1 per student
- a. Resources: Larson, Nancy. *Saxon Math 3*. Saxon Publishers, 1994.

4. Assessment

- a. Observe students' participation and work during the whole-group instruction, activity 2, and activity 3.