

Name: Candace Collins

Grade Level/Subject: 4th Grade Math

Topic: Fractions

Objectives (P.A.S.S.): 2.3b: Create physical and pictorial models of equivalent and nonequivalent fractional parts to be compared, added, or subtracted.

Students will be able to demonstrate knowledge of fractions by creating a pizza and cutting it into certain fractions.

Materials:

Little Nino's Pizzeria by Karen Barbour

English muffins

Pizza sauce

Pepperonis

Hamburger meat (cooked)

Grated cheese

Measuring cups

Fraction manipulatives

Introduction: Begin by asking students if they have ever been to Pizza Hut or Mazzios. Then ask if they know what determines the amount of slices in a pizza. Ask if they would rather have  $\frac{1}{5}$  or  $\frac{1}{7}$  of the pizza? Is it the size of pizza? After discussing how pizzas are like fractions, read Little Nino's Pizzeria. Then discuss how chefs use fractions when cooking. To make pizzas you need to understand how to read fractions and measuring cups.

Instructional process: Explain that part of a whole can be named with a fraction. Tell them a fraction is written with two numbers. The bottom number is the denominator and the top number is the numerator. The denominator tells how many equal parts there are in the whole and the numerator tells how many of the parts are being counted. Also explain that when naming a fraction, we name the numerator first, then we name the denominator using its ordinal number. Draw a circle on the board and show that it can be divided into 8 equal pieces. Then shade in 3 pieces. Explain to the students that the shaded part represents  $\frac{3}{8}$  of the circle. Use fraction manipulatives to show students the relationships between fractions. Show them how  $\frac{1}{2}$  is also equal to  $\frac{2}{4}$ . Also point out that the larger the denominator, the smaller the pieces. Then show the students different sizes of measuring cups. Explain to the students how to read the cups. Discuss the different sizes and compare their fractions.

Closure: As a closing activity, we will make individual pizzas using english muffins. Each student will be given an english muffin. They will then be instructed to put  $\frac{1}{8}$  cup of pizza sauce on their muffin. Next they will be instructed to put pepperoni on  $\frac{3}{4}$  of

their pizza and hamburger on  $\frac{1}{2}$ . They will then put  $\frac{1}{4}$  cup of cheese. After the pizzas are cooked, the students will draw to see what fraction to use to cut their pizzas. We will also discuss how much of the pizza has double meat and single meat.

Assessment: The assessment will be during the pizza making. I will walk around and assess to make sure they are using the correct fractions. I will also compare how they cut their pizza to the fraction that drew. I also have a pizza fraction worksheet if more assessment is needed.

Modifications/Accommodations: ESL/Special Education: These students will be allowed to use a fraction chart to see how the fractions compare. I will also give them more individual help during the pizza making.

Reflection: The students really enjoyed this lesson. They enjoyed how hands-on it was and they also enjoyed being able to eat the pizzas when they were finished. If you did not have access to a kitchen then they could make pizzas out of paper, but wouldn't be able to use measuring cups. I have a very small class (3) so I am able to do things that you might not be able to do in a larger class.