Unit Topic/ Theme: Mathematics

Grade: 3rd grade

Specific Topic: Introduction to fractions

Lesson Objectives:

* The student will be able to define the words fraction, numerator, and denominator as a class,
* be able to identify a numerical fraction when given illustrated examples of fractions,
* and be able to create a visual example when given a numerical fraction.

Instructional Technique:

* partner work, using computers, using manipulatives, whole-class discussions (beginning and end)

Instructional Materials:

* worksheet, manipulatives (pattern blocks), maybe extra pieces of paper and coloring utensils, website: <http://www.sheppardsoftware.com/mathgames/fractions/fracTut1.htm>

Theoretical Perspective:

* The teacher will introduce the topic of fractions first by using examples of fractions in the real world. The word “fraction” will not even be brought up until the end of the introduction. \*\*example One example should be pizza slices so that it coordinates with the website the students will use.

Procedure:

* The lesson will start of with the whole class together and an introduction to what a fraction is and what it is used for. This is when the teacher will introduce examples of fractions without using the mathematical terms at first. Towards the end of the introduction, the teacher will explain that the examples the class was exploring are examples of “fractions” and then will send the students off in pairs to use the website and explore fractions in a more mathematical way.
* The teacher will hand out a worksheet to each student. The students will then grab extra materials (pattern blocks, scrap paper and coloring utensils) that they will be able to use while they are filling out the worksheet and exploring the website. Each pair of students will have one computer and will help each other navigate the website and come up with the correct answers. The worksheet will help the students through the steps of the worksheet. The first part of the worksheet asks the students to state the parts of a fraction and write out definitions in their own words based on the information they got from the website. The students will also have to record their answers to the questions on the website numerically and visually by drawing a picture. During this time, the teacher will be around to help the students when they need it. The worksheet will also have extra questions and examples for the students to attempt on their own or in their pairs.
* To wrap up the lesson, the class will come together again and discuss their findings. The class will come up with definitions for the words “numerator,” “denominator,” and “fraction” that the teacher will record. The class will go through a couple examples of creating a fraction based on a visual example and creating a visual example based on the given numerical fraction. If there are any more questions or spots of confusion, the teacher should address those. The worksheets from all of the students will then be collected marked for completion and accuracy.
* Math-phobic students may be more comfortable with this activity because at the start of the lesson, fractions will be disguised as everyday problems instead of as a part of mathematics right away. It should also help that there are partners, and the teacher can pair up the students according to the students’ comfort levels and abilities.
* Homework that will go along with this lesson will be a lot like the worksheet that corresponded with the website.

Evaluation:

* The worksheet will be collected and evaluated based on its completion and effort from the students. The teacher will look at the accuracy, but will focus more on the accuracy of the problems on the homework since that will be completed after the whole-class discussion.