

Name: Paula Wood

Grade Level: 8th Grade

Topic: ***The Real Numbers and Subsets of the Real Numbers***

Class Time Needed: 1 day

- A. Objectives
 - a. Students will classify numbers according to the subset to which they belong.
 - b. Students will compare and order rational numbers (positive and negative integers, fractions, decimals) in real-life situations. (PASS 2.1.a)
 - c. Students will use basic operations on rational numbers to solve problems in real-life situations. (PASS 2.1.b)

- B. Materials
 - “Math Curse” by Jon Scieszka and Lane Smith
 - Paper for foldable
 - Math dictionary

- C. Instruction
 - a. Review
 - i. the meaning of number and numeral
 - ii. the fact that our number system is the decimal system and was invented by the Hindus of India, passed to their Arab neighbors, and finally to Europe around A.D. 1200.
 - iii. the decimal system uses 10 symbols that we call digits.
 - b. Introduce the set of Real numbers and subsets
 - c. Create a concept map for the real numbers and subsets
 - d. Create a foldable for the real numbers and the subsets
 - e. Read selected sections from “Math Curse” and discuss the types of numbers involved.

- D. Assessment
 - Worksheet

- E. Reflections

This lesson is one that my students have always had trouble remembering. This year I presented the information as given above and seemed to keep the students more involved and engaged in what we were doing. They were very

interested in the concept map. This group of students is very interested when I say we are going to try something different, like with the concept map, and they immediately seem to pay more attention.

This group of students also really likes the idea of foldables. They view the foldable as a different way to take notes that is more fun and interesting to them. In creating the foldable, we needed to look up a few words, such as rational and irrational. Using the smartboard we were able to simply switch to the internet and go to dictionary.com. They liked this a great deal and therefore I kept their attention. Also in looking up the words in the dictionary I was able to relate the meaning of the words in math to the meaning of the words in every day life. It was fun for me and for them.

I enjoyed the enthusiasm of the students and believe the lesson was more successful than in the past. I will definitely try it this way again.

Name _____

The Real Numbers and Subsets of the Real Numbers

1. Designate the set of integers.
2. Designate the set of counting numbers.
3. Designate the set of whole numbers.
4. Designate the set of natural numbers.

List all of the number sets to which each of the following belong.

5. $\frac{1}{2}$
6. 0.3
7. π
8. -7
9. 0
10. -0.9576