**Lesson Plan Template**

**Name: \_\_103\_\_\_\_\_\_ Course: \_\_\_\_\_\_\_Algebra 2\_\_\_\_ Grade: \_\_9-12**

**Unit: \_\_\_\_\_\_\_\_\_\_Real Numbers\_\_\_\_\_\_\_\_\_**

**Big Idea: \_\_\_** Equations and inequalities can be solved similarly, using the properties real numbers.

**Subconcept: \_\_\_\_** Real numbers consists of subsets of numbers

**Literacy Strategy(s): \_\_\_** Anticipation guide, class discussion, concept map, learning log

**Lesson: \_\_\_\_\_Real numbers\_\_\_\_\_\_\_\_\_ Date Taught: \_\_\_\_\_\_9/15/08\_\_\_\_\_\_**

**Learning Objective(s):**

* **Students will be able to \_\_Identify the subsets of real numbers\_\_\_\_\_\_\_\_\_\_\_\_**
* **Students will be able to \_**
* **Idaho Standards (or National Standards if no Idaho Standards exist): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Detailed Description of Lesson:**

**Have** students complete the anticipation guide. Students should be prepared to justify their responses with proof from the text.

**Discussion** about anticipation guide/real numbers. Students should discuss their guide with their neighbors first (I found that this helps with confidence for the large group discussion) then discuss their answers in a large group.

**Ask students to list all of the sets for which the number is included.** Give students the list of numbers and have them write which set the number is included in. They should explain why or how they know, what characteristics make it fit into each group?

 0, 0.75, ,  , -13, , 4

**Create a** concept map, in groups of 3, using the following (the concept map was finished in the subsequent period due to time constraints)

Natural numbers, whole numbers, integers, rational numbers, irrational numbers, , , -2, 0, 0.34, , 5

Homework assignment from the book: Do Pg. 8 #1-11 (identify set to which certain numbers are included)

H**andouts:** Anticipation guide

**LIMSST Project Literacy Lesson Reflection Form**

**Name: \_\_\_\_\_\_\_ Date lesson was taught: \_\_9/15/08\_\_**

**Lesson Title/Topic Areas:**

Real numbers

**Literacy Strategies Used:**

(Please discuss what literacy strategies you embedded in this lesson. What were your goals in using these strategies?)

Anticipation guide: to help students read with purpose and also to discover what they do and don't know about the topic.

Learning log: to have students really think about and understand the subsets of the real numbers. This also gives them concrete examples of the numbers in each set.

Concept map: t o help students see the relationship between the subsets of the real numbers.

**Student Response to the Lesson:**

(Was the strategy effective? Were students able to read/write as needed in this lesson? What attitudes were displayed? How did specific

 students and/or the class do? How did the literacy strategy aid in developing student understanding of the topic? Cite specific evidence from the samples of student work)

The students had a hard time with the anticipation guide at first. They were unwilling to discuss/pfove their answers by using the text. When I taught this lesson I did not have them get into small groups to discuss their answers. I have since done that with other anticipation guides and I find that they are much more willing to share if they know they are correct.

I think that this strategy really helped the students focus on what they were reading and also helped them to understand the conept.

They really were ivolved in making the concept maps. Each person in every group was engaged. There was a lot of discussion/learning going on about what they were doing.

I think the learning log went well. It really helps me to see who understands the concepts and who is still struggling to grasp.

**Lesson Reflection:**

(What worked well with this lesson? What challenges did you encounter in this lesson? Would you change certain aspects of the lesson or the questions that you asked? How does this influence future lesson planning?)

I think that this lesson went really well. The challenges were explaining how to use the anticipation guide and create the concept map. We did previous examples with an easy topic before we attempted the real numbers so it all went pretty well. When I taught this lesson I did not have them get into small groups to discuss their answers, I would change that about this lesson because it gives them more confidence in their answers and they are more willing to share.

**Relationship to Previous Instruction:**

(Have you taught this lesson/topic prior to the LIMSST project? If so, how did your teaching of this lesson differ from what you taught before? How did students’ reactions to this lesson differ?)

I have not taught this lesson before. I have never taught this class before so I have no comparison.