**Name: Brad McDannald Date: 11/04/10**

**Lesson Title: Introduction to Solar System Grade:5th Grade**

**State/System Standards:**

**GLE 0507.6.1 Compare planets based on their known characteristics.**

**GLE 0507.6.2 Recognize that charts can be used to locate and identify star patterns.**

Reading Standards: Standard 3: Curriculum- Daily exposure to a variety of print and visual media.

 Tool: The Distance from the Sun… in inches.

**Goal: Students will identify, compare, and apply the characteristics of objects in our Solar System**

**Objectives:**

* To identify characteristics and features of our Solar System.

**Set:**

* **Attention grabber/engage all students:** Ask students to think about the Solar System and try to imagine how far away the moon, Mars and Jupiter is.
* **Relate to previous learning:** You have learned about the Earth and interesting things about Earth, but what else is out there?
* **Relate to real-life:** As technology becomes more advance, scientists are always pursuing answers to the unknown. Our Solar System is vast and filled with mystery, it is important to explore the unknown so that we get a small taste of what it’s like to be a scientist.
* **State the objective:** Today we will begin to look at identifying characteristics of our Solar System.

**Instructional Procedures:**

1. Write the EQ on the board and ask students to clear their desk for a Pre-Test.
2. Ask the boys to get journals and the girls to get scissors/glue for a graphic organizer.
3. Create the graphic organizer and label two sides. “What I Knew Before…” and “What I Know Now.” Then have students write down two facts on the “What I Knew Before…” flap.
4. Have students partner up and discuss interesting facts about the solar system they know. Students should write down facts they learned from their partners on the “What I Know Now” and facts that already knew from their partner on the “What I Knew Before…” flap. Then have the student’s switch every five minutes for 15 minutes until they have met with three other people and written at least 8 facts about our solar system.
5. Ask students to return to their desk and glue graphic organizer in to their journals.
6. Ask students to clear desk and watch Brainpop video “Solar System”
7. Then ask students to add at least 2 facts to the “What I know now” side of graphic organizer from Brainpop. Ask students to share.
8. Then ask students to put away their journals and create “the distance from the sun in inches” diagram.
9. Ask students to put up journals and clear their desks to switch classes. Read AR until class switch.

**Questions for Higher-Order Thinking:**

How does seeing the distance from the sun in scale of inches help show how far we are form the sun?

What characteristics of our Solar System match what we know about things on Earth?

**Closure:**

* **Verbalization of learning by the students:** Ask the students to tell one fact about the Solar System they already knew.
* **Demonstration of skill by the students:** Ask students to describe one fact they learned.
* **Communicate future learning if necessary:** Tomorrow we will introduce the stars and star charts.

**Adaptations to Meet Individual Needs:**

Help fold the graphic organizer and cut them out with students who have trouble with this skill.

**Evaluation/Assessment:**

Graphic Organizer and class response to what they learned.

**Materials/Media:**

* Teacher Edition of Science Book.
* Color copy paper (90).
* Planets and sun for inch scale activity & (cheat sheet).
* Student Journals.
* Computer with Brainpop access.

**Reflection for Future Modification:**