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Dr. Raker  
Project 4  
5/2/14

* **Unit Topic or Theme:** Science
* **Grade:** 4th grade
* **Lesson Topic or Theme**: The Solar System
* **Lesson Objectives:** The student will be able to...
  + Identify a planet given a couple of specific factoids about that planet
  + Identify the order of the planets from the sun
* **Instructional Technique:** individual work, computer work, drawing, research
* **Instructional Materials:** worksheets, pencil/colored pencils, computer, 12x9 paper
* **Theoretical Perspective:** Students should get an idea of the size of the Solar System to put into perspective how small they are and the Earth is in comparison. Putting the planets in order of their distance from the sun is the beginning of understanding the solar system and how the planets and sun interact. More knowledge can be built off of this basic knowledge.
* **Procedure:**

1. Introductory Activity (if applicable)

There won’t really be an introductory activity for this lesson because it will come at the end of learning about the basics of the Solar System as a review for the upcoming quiz. The teacher will simply go over the requirements of the students for this lesson and show some examples of the map they will be creating. She will also hand out the worksheets and colored pencils.

1. Step-by-step (descriptive outline)

- First, the students will be asked to create a map of the solar system from their knowledge of previous lessons. This will be done on 12x9 paper with colored pencils. The students will have to label the planets and Pluto. This map will be used in the next part.

- The students will start the pre-quiz once they have finished their map. They will record their answers on the worksheet, including every attempted answer until they got it correct.

- They will also be tracing the Astronaut’s path through the Solar System on their maps.

- Once they have completed the pre-quiz, the students will go back and do a bit of research on one planet of their choosing. They will have to record 3-4 facts about this planet that they find on the links provided in the pre-quiz. If there is enough time, the students can create a poster with a picture or drawing of their planet and the facts that they found. These can then be presented to the class at the end of the lesson.  
C. Closure

The closing for this activity will be any presentations made by the students about the specific planet that they chose. This could get repetitive depending on how many students chose which planets, so they can be split into 2 or 3 groups depending on the planets that they chose. Their maps and posters will also be hung up around the classroom.  
D. Adaptations for different learners   
I would like each student to create their own map of the Solar System, but they can collaborate with other students to determine the order of the planets from the sun. If a student has difficulty reading or understanding English, they can be put with a partner to do the quiz or can work in more detail in creating the map.  
E. Homework  
Homework will be based on the amount of work that gets done in class. I anticipate that some students will get to start their research and create posters with the facts about their chosen planet while other students will just finish the map and pre-quiz. In that case, I would have the students finish their research and posters at home and they will present them informally to the class the next day.

* **Evaluation:**

1. How/ when will you determine if you have met your objectives?

* Identify a planet given a couple of specific factoids about that planet  
  - This will be determined by the answers given to the questions on the pre-quiz, which the students will record on the worksheet and the teacher will collect. It will also be determined by their posters and presentations on their chosen planet and how well they pay attention to other students’ presentations. The worksheet and poster/presentation will be graded on completion and effort.
* Identify the order of the planets from the sun  
  - This will be determined by the students’ maps that they create. They will be graded on accuracy of the order of planets from the sun.

1. Concerns or questions you have about teaching this lesson?

I wonder about the amount of time that this lesson will take. I anticipate that it will take at least two days’ worth of science periods for the students to finish this lesson, including their presentations.

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Solar System**

**STEP ONE**: Create a map of the Solar System on 12x9 paper using colored pencils. You must show the order of the planets and Pluto from the sun. Label each planet with its name.

**STEP TWO**: Do the Pre-Quiz and record your answers to each question, including how many tries it takes you to get the correct answer. Also, trace the Astronaut’s path through space on your map.

1st try (2nd try) (3rd try) (4th try)

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**STEP THREE**: Now go back and click on a planet to learn more. Write down 3-4 facts about the plane that you chose and create a poster with a picture or a drawing of your planet and the 3-4 facts that you found. You will share your poster with the class once you have finished.