**DI Lesson Planning Template**

**Teacher Name: Lori Alvis, Librarian**

**Subject Area:** 4th grade Science – Solar System - Librarian collaborating with the 4th grade Science teacher. The Science teacher will teach the unit and do the main assessment, I will reinforce what is taught in the classroom and will provide extra library time for students to complete their choice board activities.

**Date: Spring 2014**

**State Standards/Benchmarks:** Science 4.7 Earth Patterns, Cycles, and Change

 The student will investigate and understand the organization of the solar system. Key concepts include

a) the planets in the solar system;

b) the order of the planets in the solar system; and

c) the relative sizes of the planets.

**Lesson Essential Question:** What is the order of the planets and their relative sizes?

**Time Required: Library – Three 30 minute classes.**

 **Classroom – Approximately two weeks.**

**What will I differentiate?**

* **Process –** Students may choose to work individually or in pairs to complete the choice board activities.
* **Product –** Students will select three activities from a choice board to complete.

**How will I differentiate?**

* **Combination –** Students will be working either individually or in pairs to complete their choice board activities in the Science classroom and in the library.

**As a result of this lesson/unit students will:**

**Understand:** That there are eight planets in our solar system.

**Know:** Know the names of each of the eight planets in the solar system in sequence based on their position from sun.

**Do (Skills):** Students will choose three activities from the choice board to complete. These activities range from creating a Wordle from the unit vocabulary list, creating a simple model of the sun and the planets in the solar system, to writing and illustrating a story that is set on another planet.

**Pre-Assessment:** Exit slips to name the order of the planets.

**Steps in the Lesson**:

**Day One in the Library**: Introduction to the Solar System Unit before the Science teacher begins her lessons.

Read: “*Star Wars® Earth’s Solar System: Facts about our Galaxy!*” By Samantha Margles (Non-Fiction with a storyline)

Learn: The order of the planets – Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune (My Very Educated Mother Just Served Us Nachos)

View and Sing: Energizers – Solar System Rap [www.watchknowlearn.org/Video.aspx?VideoID=33414](http://www.watchknowlearn.org/Video.aspx?VideoID=33414)

Exit Ticket: Students will write the names of the planets in order: (M, V, E, M, J, S, U, N)

 \*\*Along with the Science teacher’s lesson plans and assessments; she will introduce the Solar System Choice Board. She will allow class time and will also bring students to the library at designated times throughout the next two weeks to allow students access to library and reference books as well as computers to finish some assignments. Both teacher and librarian will be present to assist students.\*\*

**Day Two in the Library**:

Review with Energizers – Solar System Rap [www.watchknowlearn.org/Video.aspx?VideoID=33414](http://www.watchknowlearn.org/Video.aspx?VideoID=33414)

Read: “*Magic School Bus: Lost in the Solar System*” by Joanna Cole (Fiction story with non-fiction facts)

Create: Planet Order bookmarks.

**Day Three in the Library:**

Closure Activity/Wrap up**:** Use day three to present the Solar System Choice Board technology projects.

**Post-Assessment:**

* Compile data from assessment to see where students struggle or excel.
* Did students seem engaged and interested in the choice activities?
* What were the challenges of some of the activities?
* Did students have enough understanding of technology to create some of the choice activities?
* Were there enough activities to keep the gifted students/special education students interested?
* Were there the activities to meet many types of learning styles?

**Integrated Instructional Technologies and Resources Utilized:**

[www.watchknowlearn.org/Video.aspx?VideoID=33414](http://www.watchknowlearn.org/Video.aspx?VideoID=33414) <http://studyjams.scholastic.com/studyjams/jams/science/solar-system/day-on-earth.htm> <http://cse.ssl.berkeley.edu/AtHomeAstronomy/activity_09.html> <http://iq.poquoson.org/4sci/solarsystem/4solarsystem02tlm1.htm> - interactive solar system quiz

[www.wordle.net](http://www.wordle.net)

Microsoft Powerpoint

<http://nems.gilesk12.org/world/default.htm> - World Book <http://sciencenetlinks.com/interactives/messenger/psc/PlanetSize.html>

**Weebly Link**: http://2014diffnemslibrary.weebly.com/