

Theme:

The Universe. I chose the universe because there is a lot of information out there regarding it and it is a part of the 6th grade standards. Throughout this unit, we will focus on the universe and gain an understanding of what it consists of, particularly the order of the planets and how they relate to earth.

Book(s):

The Magic School Bus Lost in the Solar System

Other Resources:

<http://www.solarviews.com/eng/homepage.htm>

<http://www.nationalgeographic.com/solarsystem/ax/low.html?2d>

<http://space.jpl.nasa.gov/>

<http://www.solarsystem.nasa.gov/kids/index.cfm>

Crafts for Kids Who are Wild About Outer Space by Kathy Ross

Academic Standards:

6.3.1 Compare and contrast the size, composition, and surface features of the planets that comprise the solar system, as well as the objects orbiting them. Explain that the planets, except Pluto, move around the sun in nearly circular orbits.

6.3.2 Observe and describe that planets change their position relative to the background of stars.

6.3.3 Explain that Earth is one of several planets that orbit the sun, and that the moon, as well as many artificial satellites and debris, orbit around Earth.

6.2.4 Clarify an understanding of texts by creating outlines, notes, diagrams, summaries, or reports.

6.5.3 Write research reports that: -pose relevant questions that can be answered in the report –support the main idea or ideas with facts, details, examples, and explanations from multiple authoritative sources, such as speakers, newspapers and magazines, reference books and online information searches –include a bibliography.

Objectives:

Students will be able to identify all the planets in correct order from the closest to the sun to the furthest from the sun.

Students will be able to name characteristics of each planet.

Students will create their own models of the universe.

Students will be able to chart the different phases of the moon over a month's period.

Activities:

-To start the unit, the teacher will pass out a sheet with a picture of the solar system and the students will be asked to label those in which they know. This will allow the teacher to see if there are any students with prior knowledge about the universe. Next, the teacher will read *The Magic School Bus Lost in the Solar System*, and have the students take notes about the different terms that are noted throughout the book. At the conclusion of the book, the students will be put into groups by counting off to 9. They will be placed in different learning centers that include posters, books, and other informational material

to help them get started. Each learning center will focus on one planet and this will be the planet in which the students will be writing their report on. While at their learning center, they will be provided with a list of things they need to research for their papers that they will be writing. Throughout their learning center time, they should be finding the suggested information and use this time to help one another out with finding information. (Interpersonal & Knowledge)

-The students will learn a song about the solar system. Once the students know the lyrics to the song, they will choreograph it as a class. Nine students will become planets and five students will become the sun to show how large it is in comparison to the planets. The remaining number of students will be satellites floating throughout space, asteroids, and comets. After completing the choreography and lyrics to the song, the students can present their song to parents at the annual 6th grade program. (Musical, Kinesthetic, & Application)

-Each night for two weeks, students will be responsible for recording/drawing what they see in the sky, particularly the moon. Each student will be responsible for keeping a journal with sketches and notes about what he/she sees each night and predictions about what they will see the following night. At the conclusion of the two weeks, the class will put together their observations and talk about the different phases of the moon and what causes them. (Naturalist, Evaluation, Logical/Mathematical, & Analysis)

-Students will be expected to create a solar system of their own, whether it's a mobile, model, or drawings. Planets should appear to be at scale with one another and spaced according to how they appear in the solar system. (Visual/Spatial & Synthesize)

-After researching as a group, the students will individually put together a report in which they will present to the class orally. Throughout this presentation, the students are asked to share the different models and information in which they had obtained throughout the unit. They will provide the class with information about their assigned planet and share any models or materials they have. (Intrapersonal, Verbal/Linguistic, Comprehension, & Synthesis)

Time Schedule:

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	Introduction Read book Learning centers Assign moon logs	Learning centers Listen to song	Learning centers Begin learning song	Assign model Learning centers Practice song	Learning centers Practice song Answer any questions about logs
Week 2	Learning centers Choreograph	Learning Centers Choreograph	Learning centers Choreograph Answer any questions	Oral presentations	Oral presentations Program for parents

Grouping:

After taking a look at the initial sheet passed out at the beginning of the unit, the students will be placed into groups according to what they already know about the universe and my prior knowledge of how well they learn and interact with other students. For those already knowing some information about the universe, they will be placed in groups with individuals that may not know as much information. More outgoing individuals will be placed with those that may not normally become active in group work. This will provide certain students with a sense of encouragement and assistance from his/her peers. Since these students will be working together on a daily basis to research information about their assigned planet, it will help them create a relationship with one another.

Checklist:

See attachment.

Bloom's Taxonomy:

Knowledge- Can you list the planets in the solar system?

Comprehension- Can you locate the planets in order from closest to furthest from the Sun?

Application- Can you construct a model of the solar system?

Analysis- Will you compare the planet in which you studied to the Sun?

Evaluation- As you observe the moon, can you predict what it may look like the following night?

Synthesis- Can you develop a report to present to the class about your planet with valid information?