Lesson 12 – Planetary Posters *(required)*

Background

For this required lesson, students will work on creating a Planetary Poster from the information gathered on the Planetary Trading Cards Lesson 11 and the mnemonic lesson (Lesson 4).

Students can create individual charts and then transfer the information to a poster that can be easily accessible for the e-Mission.

Teacher Notes and Hints

Prior to the lesson

(If you have collected the Planetary Trading Cards for an assessment, you will have to return them for the students do this activity.)

Decide how you want the students to work on this activity.

- If they have worked in groups to make the Planetary Trading Cards, they should work in groups to make the poster.
- If they worked individually on the Planetary Trading Cards, you could have them continue individual work or divide them into groups to make the poster.
- The students can be divided according to Planet Team; each Planet Team would produce a poster to be displayed during the mission. This encourages collaborative work by the team and reinforces planet material learned.

Skills and Objectives

Students will be able to:

- Recognize basic concepts related to the planets, such as their appearance, size, distance to Sun, major moons, and distinguishing features
- Learn basic planetary vocabulary associated with planet characteristics, such as gravity, atmosphere, orbit, temperature, kilometers, and Celsius
- Compare and contrast planetary features
- Construct a poster that displays the major characteristics of the planets

Vocabulary

Vocabulary for this lesson reviews the vocabulary from previous lessons.

Key Concepts

1. Planets have different characteristics according to their composition.
2. Planets of the inner solar system have characteristics in common and planets of the outer solar system have characteristics in common.
3. The planets of our solar system have different colors because of the composition of their atmosphere or rocky surfaces.

Materials

- Planetary Trading Cards
- Poster boards (can be full-sized or cut in half)
- Markers
- Colored pencils
- Rulers or meter sticks
- Reference materials

Procedure

Preview the lesson with the students so they know they are using the Planetary Trading Card facts to create an important poster for Mission Day work.

Tell the students if they are missing any information for the poster, they are to use their references to find it.

Distribute the materials for the students to use to construct their posters.

Allow the students to present their Planetary Posters to the class. During this time, encourage discussion; have the students look for similarities and differences between the planets.

Display the posters in the classroom or hallway.

Extensions

The students can create a three-dimensional model of the solar system using Styrofoam balls to create the planets. They should try to keep the model as accurate as possible by keeping in mind the relative sizes of the planets. They can also paint on or use markers to provide for any distinguishing features the planet might have (you may refer to the Extension on Lesson 3).

Review the planet information by playing Planet Jeopardy with the students. Give them a characteristic and have them tell you the planet name. You can divide the class into teams and have them play each other.

Sample questions:

- The planet that spins backwards……Venus
- The planet with the most rings……Saturn
- The blue planet……Earth
- The planet with water in solid, liquid, and gas forms……Earth
- The "double planet"……Pluto and Charon
- The planet with a blue-green color……Neptune, Uranus
- The planet with only two moons……Mars
- Name them……Phobos and Deimos
- A planet with only 1 moon……Earth
- The planet with the fastest orbital speed……Mercury
- The most massive planet……Jupiter
- The planet with the least gravitational pull……Pluto
- The planet with a reddish color……Mars
- The planet whose day is longer than its year……Venus

You can review planetary vocabulary in the same way. Quiz the students on the vocabulary asociated with the Moon, Mars, and Beyond Mission work.