

Unit 4: Earth in Space
Chapter 11: Our Solar System

Name: _____ Starting Date: _____

Number: _____ Ending Date: _____

Lesson 1: Structure of the Solar System

Objectives: - Students will explain why the planets can be seen in the night sky.
- Students will identify the different objects in the solar system.
- Students will describe the size of the solar system.
- Students will describe how the planets move around the Sun.

Cal. State Standards:

- 2.G Students know the role of gravity in forming and maintaining the shapes of planets, stars, and the solar system.
- 4.C Students know how to use astronomical units and light years as measures of distance between Sun, stars and the Earth.
- 4.E Students know the appearance, general composition, relative position and size, and motion of objects in the solar system, including planets, planetary satellites, comets and asteroids.

Assignments:

- A. Read pages 462-470. Outline the section. Be sure to include all the key terms in the outline.
- B. Do Lesson 1 Review page 470.
- C. Do Chapter Content Mastery (worksheet page 12).
- D. Do Enrichment (worksheet page 24).

Lesson 2: The Sun-Earth-Moon System

Objectives: - Students will model reflected light from the Sun causes the Moon to shine.
- Students will explain why the moon has phases.
- Students will compare an eclipse of the Moon and an eclipse of the Sun.

Cal. State Standards:

- 4.D Students know that stars are the source of light for all bright objects in outer space and that the Moon and planets shine by reflected sunlight, not by their own light.

Assignments:

- A. Read pages 472-477. Outline the section. Be sure to include all of the key terms in the outline.
- B. Do Lesson 2 Review on page 476.
- C. Do Chapter Content Mastery (worksheet page 13).
- D. **Virtual Lab: *How do Earth and the Moon interact to cause the Moon's Phases?*** Visit ca8.msscience.com and complete the lab under Chapter 11. Be sure to do the Journal Questions.
- E. Do the Mini Lab on page 477 (be sure to do the Analysis questions).
- F. Do Reinforcement (worksheet page 21).

Lesson 3: The Planets and Their Moons

Objectives: - Students will compare and contrast the inner planets.
- Students will compare and contrast the outer planets.
- Students will *compare and contrast these planets' moons*.

Cal. State Standards:

- 4.D Students know that stars are the source of light for all bright objects in outer space and that the Moon and planets shine by reflected sunlight, not by their own light.
- 4.E Students know the appearance, general composition, relative position and size, and motion of objects in the solar system, including planets, planetary satellites, comets and asteroids.

Assignments:

- A. Read pages 478-488. Outline the section. Be sure to include all of the key terms in the outline.
- B. Do Lesson 3 Review on page 488.
- C. Do Chapter Content Mastery (worksheet page 14).
- D. Do Enrichment (worksheet page 26).
- E. **Planets Quiz:** Students will be able to list the nine planets in order, and must state the following for each:
 1. State whether each planet is Terrestrial (inner), Gas Giants (Outer) or neither
 2. Number of moons
 3. Atmospheric conditions
 4. Two other pieces of information (Ex. Mars has huge dust storms which often blanket the planet)

Planets Quiz Date: _____