**The Sun, Earth, and Moon System Unit**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_

**Due Date: September 29**

The Big Idea: Motion and Gravity

The Big Question: **What effects are caused by the motion of Earth and the Moon?**

|  |  |
| --- | --- |
| Directions | Examine the activities you can do to learn the unit objectives. All of the activities and the dates we are doing them are listed below. They are due at the latest on September 29. No work will be accepted after September 29 unless you are absent that day.  ‘C’ assignments are required for every student to do. These will help you learn the basics of the unit. After you have mastered the basics, move to section B and then section A for more challenging activities. You must demonstrate knowledge for each level (by completing all of the **required** assignments) before moving on to the next section.  When you complete an activity, you must turn it in to receive feedback. YOU MAY NOT TURN IN MORE THAN ONE LATE ACTIVITY PER DAY. Including the last day of the unit.  As always, if you have questions ask or email. |
| Objectives | * *Compare* the relative sizes and distances of the Sun, *Moon*, and Earth.. * Use a simple labeled drawing of the Earth-Sun-*Moon* *system* to *explain* day and night. * Use a labeled diagram to show Earth’s position in the *Solar System*, the *Solar System*’s position in the Milky Way, and the Milky Way among other galaxies. |
| State Standards Addressed | |  |  | | --- | --- | | 6-8 ES1B | Earth is the third planet from the sun in a *system* that includes the *Moon*, the Sun, seven other major planets and their *moons*, and smaller objects such as *asteroids*, *plutoids*, *dwarf planets* and *comets*. These bodies differ in many *characteristics* (e.g., size, composition, relative position). | | 6-8 ES1C | Most objects in the *Solar System* are in regular and predictable *motion*. These *motion*s *explain* such *phenomena* as the day, the year, *phases of the Moon*, and *eclipses*. | |  |  | | 6-8 ES1E | Our Sun is one of hundreds of billions of stars in the Milky Way galaxy. Many of these stars have planets *orbiting* around them. The Milky Way galaxy is one of hundreds of billions of galaxies in the universe. | |

Use the calendar to document your progress each day. The suggested dates are for a letter grade of a C. If you chose to earn a B or an A, you must adjust your schedule to allow extra time to complete B grade and A grade assignments.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| **9/8**  **Systems** | **9/9**  **Introduce Unit**  **Mind Maps** | **9/10**  **Scale of the SEM** | **9/11**  **GLAD: SEM Size/Distance**  **SEM**  **Size/distance**  **drawing** | **9/12**  **Our Place in the**  **Universe**  **Drawing** |
| **9/15**  **How Does the**  **Earth Move**  **Rotation**  **Model** | **9/16**  **Continue**  **Rotation Model** | **9/17**  **How Does the Earth Move Revolution Model** | **9/18**  **SLAM**  **How Does the**  **Moon Move**  **Model** | **9/19**  **Motion of the SEM worksheet** |
| **9/22**  **SSR**  **Draw Day/Night**  **Motions Process Grid** | **9/23**  **SSR**  **What is the**  **Moon Like?**  **‘Will We Live on**  **the Moon’**  **Reading** | **9/24**  **SSR**  **Landing on the**  **Moon Activity** | **9/25**  **SSR**  **Review Guide** | **9/26**  **No School** |
| **9/29**  **ALL C, B and A work due TODAY**  **Go over Review Guide/Review Game** | **9/30**  **SEM TEST** |  |  |  |
|  |  |  |  |  |

**C Activities**

Practice Layer

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Activity | Due Date | Points | Completed  and  turned in  ✔ | State Standard  (Keep) |
| **Scale of the Sun, Earth and Moon System** | 9/11 | 10 |  |  |
| **SEM Size/Distance Drawing** | 9/12 | 15 |  | \* |
| **Our Place in the Universe Drawing** | 9/15 | 15 |  | \* |
| **Motion of the Earth and Moon Worksheet** | 9/22 | 10 |  |  |
| **Rotation, Revolution Drawings** | 9/23 | 10 |  | \* |
| **Motions of the Earth and Moon Process Grid** | 9/23 | 10 |  |  |
| **Landing on the Moon** | 9/25 | 10 |  |  |
| **Review Guide** | 9/29 | 10 |  |  |
| **Test** | 9/30 | 180 |  |  |

**B Activity (Choose one) All C work must be turned in for this to be accepted. Must be typed.**

|  |  |  |  |
| --- | --- | --- | --- |
| 1. Draw a Time Line of the Space Program 2. Interview an adult about the space program 3. The Evolution of Lunar Landscapes 4. Build A Simple Sundial | 9/29 | 15 |  |

**A Activity (Choose one) All C and B work must be turned in for this to be accepted. Must be typed.**

|  |  |  |  |
| --- | --- | --- | --- |
| 1. Create a Travel Brochure For the Moon 2. Write a Newspaper Article about the Origins of the Moon 3. Graph Sunspots 4. Should We Return to the Moon? 5. Create A Universal Address ET Could Use to Find You. | 9/29 | 15 |  |