

GREEN TEAM SCIENCE: Mrs. Ferdinand  
**Exploring the Solar System Unit Assessment Study Guide**  
*Test Date: Monday, November 20, 2017*

**Vocabulary**

You should know the definitions and applications of the following vocabulary words.

1. **Satellite:**
2. **Terrestrial:** Representing the Earth as distinct from other planets
3. **Astronomical unit (AU):** unit of measurement used by astronomers to measure distances in the Solar System. (1 AU = 150,000,000 km >>>distance between Earth and the Sun)
4. **Remote sensing:**
5. **Mass:**
6. **Weight:**
7. **Gravity:**

**Activity 86 & 88: Observing Objects in Space / Classifying Space Objects**

- What objects are found in Space?
- What is the name of our Solar System?
- Be able to classify objects in space based on the Astronomers Classification

**Activity 87: Telescope Technology**

- What kinds of telescopes have been invented?
- Are any of these currently orbiting Earth? If so, which one(s)?
- Name 2 kinds of technology that we use to identify space objects?
- How have those helped advance our knowledge of space exploration?

**Activity 89: Where in the Solar System Am I?**

- Review Sheet 89.1 and your homework assignment.
- Know the characteristics of the 4 planets that Kayla, Len, Ronin and Ava sent their messages from.

**Activity 90: Drawing the Solar System**

- Know the order of the planets in the Solar system.
  - Which planet is closest to the Sun?
  - Which planet is farthest from the Sun?
- In what ways are the models we often see of the Solar System inaccurate. Name at least 4 ways.

**Activity 92: The Nearest Star: The Sun**

- What classification of space objects would the Sun fall into?

- What is the Sun composed of?
- How is the Sun's energy produced?
- Describe nuclear fusion.

### **Activity 93 & 94: Remote Sensing**

- Name some of the benefits of remote sensing?
- What kinds of equipment / technology is used in remote sensing?

### **Activity 95 & 96: Universal Gravitation / The Effects of Gravity** (\*\*use notes on gravity)

- What 2 factors affect gravitational force?
- Differentiate between mass and weight?
- Complete the following sentence:
  - \_\_\_\_\_ changes based on location. \_\_\_\_\_ is always the same regardless of location.
- What is the relationship between mass, distance and gravitational force?
- How is weight affected by gravitational force?
- When a rocket is launched, how does the spacecraft remain in orbit? Your answer should mention gravitational force and speed?
- What would happen if the rocket launch speed was too fast or too slow? In either scenario, what do you expect to happen??

### **Activity 97: Exploring Outer Space**

- What is a piloted mission versus an unpiloted mission?
- State 2 advantages and 2 disadvantages of each.
- What technology or equipment might you require for each kind of mission?
- What are the possible tradeoffs that you may need to consider?