

Торіс

Universe and The Solar Family

@crestolympiads

🖄 info@crestolympiads.com

) +91-98182-94134

Worksheet on Universe and The Solar Family

1. Which of the following statements is true regarding dwarf planets?

- a. Dwarf planets are larger in size compared to regular planets.
- b. Dwarf planets have significant gravitational influence, similar to regular planets.
- c. Dwarf planets cannot clear their orbits of other objects like regular planets.
- d. Dwarf planets have solid surfaces and are classified as terrestrial planets.

2. Ron visited a science museum and observed two planet models. One planet had a prominent red spot, while the other displayed stunning ring structures. Which of the following planets are most likely represented by these models?

- a. Jupiter and Saturn
- b. Mars and Saturn
- c. Jupiter and Neptune
- d. Venus and Mercury

3. Match the following planets with their corresponding characteristics.

	Column I		Column II
1.	Neptune	Α.	Smallest planet in our solar system
2.	Mars	В.	Ice giant with a unique sideways rotation
3.	Mercury	С.	Reddish colour due to iron minerals in the soil

- a. 1:A, 2:C, 3:B
- b. 1:B, 2:C, 3:A
- c. 1:C, 2:B, 3:A
- d. 1:B, 2:A, 3:C

4. Identify the pair of Jovian planets from the following planets.

- a. Mars and Venus
- b. Pluto and Ceres
- c. Jupiter and Mercury
- d. Neptune and Uranus

5. Which of the following experiments is most suitable for demonstrating the concept of Earth's rotation?

RES I

- a. Measuring the changing length of a shadow throughout the day.
- b. Examining the effects of different lighting conditions on plant growth.
- c. Analysing the change in seasons.
- d. Investigating the relationship between weight and mass using falling objects.

Answer Key

- **1.** c Unlike regular planets, dwarf planets have not cleared their orbits of other debris and objects. They share their orbital paths with other objects, such as asteroids or moons.
- **2.** a The planet models with a prominent red spot and stunning ring structures most likely represent Jupiter and Saturn. Jupiter is known for its Great Red Spot, a massive storm, while Saturn is famous for its beautiful and intricate ring system.
- b -Neptune: Ice giant with a unique sideways rotation Mars: Reddish colour due to iron minerals in the soil Mercury: Smallest planet in our solar system
- **4.** d The pair of Jovian planets from the given options is Neptune and Uranus.
- **5.** a Measuring the changing length of a shadow throughout the day is the most suitable experiment for demonstrating the concept of Earth's rotation. By observing how the length of a shadow changes, one can understand the movement of the Sun across the sky as a result of Earth's rotation.

More Questions Coming Soon – Keep Learning!

Difference between Ordinary & Extra-Ordinary is that "Little Extra"

