

MCQ 1

Question: Which of the following statements about the terrestrial planets is NOT accurate?

- A) They are primarily composed of rock and metal.
- B) They possess a solid, rocky surface.
- C) They all have a substantial atmosphere comparable to Earth's.
- D) They are located closer to the Sun than the gas giants.

Correct Answer: C

MCQ 2

Question: Europa, a moon of Jupiter, is of particular scientific interest primarily due to:

- A) Its exceptionally large size compared to other Jovian moons.
- B) The potential presence of a subsurface liquid water ocean, raising the possibility of life.
- C) Its highly volcanic activity, similar to Io.
- D) Its dense, oxygen-rich atmosphere.

Correct Answer: B

MCQ 3

Question: The division of planets into terrestrial and gas giants is primarily based on which two factors?

- A) Size and distance from the Sun.
- B) Composition and presence of moons.
- C) Composition and size.
- D) Temperature and orbital period.

Correct Answer: C

MCQ 4

Question: What differentiates comets from asteroids in our solar system beyond their composition?

- A) Comets have elliptical orbits while asteroids have circular orbits.

- B) Comets develop a coma and tail as they approach the Sun due to the sublimation of volatiles, a characteristic not observed in asteroids.
- C) Comets originate from the Kuiper Belt while asteroids originate from the Oort Cloud.
- D) Comets are significantly larger than asteroids.

Correct Answer: B

MCQ 5

Question: Which of the following is NOT considered a crucial factor contributing to the Earth's ability to support life as we know it?

- A) Presence of liquid water.
- B) Strong magnetic field deflecting harmful solar radiation.
- C) Its position as the third planet from the Sun.
- D) High concentration of oxygen in the atmosphere.

Correct Answer: D