

Oceanography and Planetary Science

Oceanography · Answer Key · 10 Questions

1. Which force, primarily caused by the Moon's gravity, is responsible for the rise and fall of Earth's ocean tides?

- A) Solar wind
- B) Magnetic field
- C) Lunar gravity**
- D) Atmospheric pressure

2. Which planet in our solar system is known to have a subsurface ocean beneath a thick icy shell, making it a target for astrobiology?

- A) Europa (moon of Jupiter)**
- B) Venus
- C) Mars
- D) Mercury

3. What is the primary reason Earth is often called the 'Blue Planet' when viewed from space?

- A) Reflection of the sky
- B) Presence of liquid water oceans**
- C) Composition of the atmosphere
- D) High oxygen content

4. How much of Earth's surface is covered by oceans, a feature that distinguishes it from the barren landscapes of neighboring planets like Mars?

- A) About 30%
- B) About 70%**
- C) About 50%
- D) About 90%

5. Unlike Earth, which planet has an atmosphere so hot that any surface water would immediately evaporate into space?

- A) Venus**
- B) Neptune
- C) Saturn
- D) Uranus

6. Which celestial body exerts the strongest gravitational influence on Earth's oceans?

- A) The Sun
- B) The Moon**
- C) Jupiter
- D) Mars

7. Which of these objects in our solar system is confirmed to have 'seas' made of liquid methane and ethane rather than water?

- A) Titan (moon of Saturn)**
- B) The Moon
- C) Pluto
- D) Venus

8. What is the main source of heat that keeps Earth's oceans in a liquid state, unlike the frozen oceans found on distant outer moons?

- A) The Sun**
- B) Friction from rotation
- C) Radioactive decay
- D) The Moon

9. Earth's oceans act as a giant thermal regulator, a process not found on planets without liquid water such as:

- A) Mars**
- B) Jupiter
- C) Neptune
- D) Saturn

10. Which gas in Earth's atmosphere, regulated by the oceans, helps keep the planet warm enough to sustain liquid water?

- A) Carbon dioxide**
- B) Helium
- C) Neon
- D) Argon