

Astrochemistry Fundamentals

Chemistry · Answer Key · 10 Questions

1. Which chemical element is the most abundant in the universe?

- A) Helium
- B) Oxygen
- C) Hydrogen**
- D) Carbon

2. What is the primary chemical compound found in the ice caps of Mars?

- A) Solid carbon dioxide**
- B) Solid methane
- C) Solid ammonia
- D) Solid nitrogen

3. Which gas is responsible for the distinct blue colour of Neptune's atmosphere?

- A) Oxygen
- B) Methane**
- C) Nitrogen
- D) Neon

4. What is the most common element found in the core of the Sun?

- A) Iron
- B) Hydrogen**
- C) Gold
- D) Silicon

5. Which element makes up the majority of the atmosphere on Venus in the form of carbon dioxide?

- A) Carbon**
- B) Nitrogen
- C) Helium
- D) Argon

6. Comets are primarily composed of what substances?

- A) Liquid metal
- B) Frozen gases and dust**
- C) Solid volcanic rock
- D) Compressed helium

7. Which element, discovered in the Sun's spectrum before being found on Earth, is the second most abundant in the universe?

A) Helium

B) Lithium

C) Oxygen

D) Neon

8. What is the chemical symbol for the element that makes up the majority of Earth's atmosphere?

A) O

B) H

C) N

D) C

9. Which metallic element is found in high concentrations in the core of the Earth, contributing to its magnetic field?

A) Aluminium

B) Iron

C) Lead

D) Calcium

10. Silicate minerals, which make up most of the Earth's crust, are primarily composed of silicon and which other element?

A) Oxygen

B) Gold

C) Hydrogen

D) Helium