

Biology and the Universe: A North American Perspective

Science · Answer Key · 20 Questions

1. Which planet in our solar system is known as the 'Red Planet' and has been the target of many robotic biological exploration missions by NASA?

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

2. What is the primary source of energy for almost all biological life on Earth?

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

3. Which North American space agency is responsible for researching the effects of space travel on human biology?

- A) ESA
- B) JAXA
- C) NASA**
- D) Roscosmos

4. What celestial body provides the gravitational pull responsible for the tides that affect coastal biological ecosystems in North America?

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

5. Which gas, vital for the survival of aerobic biological organisms, is found in the Earth's atmosphere?

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

6. Which planet is the largest in our solar system?

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

7. What is the name of the galaxy that contains our Solar System and the planet Earth?

A) Andromeda

B) Milky Way

C) Sombrero

D) Whirlpool

8. Which organ in the human body is most affected by microgravity, leading to muscle and bone loss during long-term space missions?

A) Brain

B) Stomach

C) Musculoskeletal system

D) Liver

9. What do plants absorb from the atmosphere to perform photosynthesis, a process essential for life on Earth?

A) Nitrogen

B) Carbon dioxide

C) Neon

D) Argon

10. Which planet is closest to the Sun?

A) Venus

B) Earth

C) Mercury

D) Mars

11. What is the study of the possibility of life existing elsewhere in the universe called?

A) Geology

B) Astrobiology

C) Meteorology

D) Oceanography

12. Which planet is often called Earth's 'sister planet' due to its similar size and density?

A) Mars

B) Venus

C) Jupiter

D) Saturn

13. How many planets are in our solar system?

- A) 7
- B) 8**
- C) 9
- D) 10

14. What layer of the Earth's atmosphere protects biological life from harmful ultraviolet radiation from the Sun?

- A) Troposphere
- B) Ozone layer**
- C) Mesosphere
- D) Thermosphere

15. Which dwarf planet was famously reclassified in 2006?

- A) Ceres
- B) Eris
- C) Pluto**
- D) Haumea

16. What force keeps biological organisms on the surface of the Earth?

- A) Magnetism
- B) Gravity**
- C) Friction
- D) Inertia

17. What is the name of the star at the center of our solar system?

- A) Proxima Centauri
- B) Polaris
- C) The Sun**
- D) Betelgeuse

18. Which planet has the most extensive and visible ring system?

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

19. What is the process called when plants convert sunlight into chemical energy?

- A) Respiration
- B) Photosynthesis**
- C) Digestion
- D) Fermentation

20. Which instrument is used by scientists to observe distant stars and galaxies?

A) Microscope

B) Telescope

C) Stethoscope

D) Barometer