

Question 1

When electromagnetic radiation is created it is said to be

- A) reflected
- B) emitted
- C) refracted
- D) absorbed

Answer: <https://biology-forums.com/index.php?topic=748352>

Question 2

Evidence from the analysis of zircon crystals suggests that the Earth

- A) may have been habitable immediately after its formation
- B) could only have been habitable after significant amounts of oxygen had built up in its atmosphere
- C) could only have been habitable after the end of the Hadean Eon 500 million years ago
- D) may have been habitable in as little as 100 million years after its formation

Answer: <https://biology-forums.com/index.php?topic=748474>

Question 3

During the past few million years, ice ages were MOST LIKELY caused by

- A) changes in the distance from the Earth to the Sun
- B) small changes in the Earth's axis tilt and orbit
- C) changes in the heat released from the Earth
- D) changes in the energy output of the Sun

Answer: <https://biology-forums.com/index.php?topic=748530>

Question 4

The first person to claim to see linear features on the surface of Mars was

- A) Angelo Secchi
- B) Percival Lowell
- C) Giovanni Schiaparelli
- D) William Herschel

Answer: <https://biology-forums.com/index.php?topic=748852>

Question 5

In the simplified Drake equation, the total number of life-bearing planets in our galaxy is given by

- A) NHP
- B) flife
- C) $NHP \times flife$
- D) $NHP / flife$

Answer: <https://biology-forums.com/index.php?topic=749209>

Question 6

Most of the time, planets are observed to

- A) be stationary with respect to background stars
- B) move eastward with respect to background stars
- C) move due south with respect to background stars
- D) move westward with respect to background stars

Answer: <https://biology-forums.com/index.php?topic=748210>

Question 7

In which eon of Earth's history did the heavy bombardment occur?

- A) Hadean
- B) Archean
- C) Phanerozoic
- D) Proterozoic

Answer: <https://biology-forums.com/index.php?topic=748459>

Question 8

Which domains of life consist entirely of microbes?

- A) bacteria only
- B) archaea and eukarya
- C) bacteria and archaea
- D) archaea only

Answer: <https://biology-forums.com/index.php?topic=748609>

Question 9

Much of Europa's surface appears chaotic and clogged with huge iceberg-like blocks. This is consistent with

- A) a thin icy crust that has been broken into pieces by tidal forces below which is a subsurface ocean of water
- B) the surface thawing due to heat emitted by Jupiter
- C) the breaking up of the surface due to plate tectonics
- D) a giant impact that has recently shattered the crust into pieces

Answer: <https://biology-forums.com/index.php?topic=748981>

Question 10

Between the orbits of the planets Mars and Jupiter we find

- A) the Oort cloud
- B) Orion's belt
- C) the Kuiper belt
- D) the asteroid belt

Answer: <https://biology-forums.com/index.php?topic=748366>

Question 11

The point in time when the expansion of the universe began is referred to the

- A) big crunch
- B) cosmic detonation event
- C) big bang
- D) big blowup

Answer: <https://biology-forums.com/index.php?topic=748291>

Question 12

Particles of matter and antimatter have the

- A) same charge and mass
- B) same charge but different mass
- C) different charge and mass
- D) same mass but opposite charge

Answer: <https://biology-forums.com/index.php?topic=749317>

Question 13

Which kind of robotic space mission enables us to take a quick look at a planet?

- A) sample return
- B) flyby
- C) orbiter
- D) lander/probe

Answer: <https://biology-forums.com/index.php?topic=748836>

Question 14

The number of impact craters on the slopes of Tharsis volcanoes suggests that they have been inactive

- A) since Mars formed 4.6 billion years ago
- B) for at least a billion years
- C) for at least tens of millions of years
- D) only for the last few hundred years

Answer: <https://biology-forums.com/index.php?topic=748899>

Question 15

Modern day living stromatolites which resemble ancient stromatolites very closely have been found in

- A) the Yucatan peninsula, Mexico
- B) South West Greenland
- C) Western Australia
- D) Yellowstone National Park, U.S.A.

Answer: <https://biology-forums.com/index.php?topic=748666>

Question 16

Which of the following statements regarding the determination of surface habitability and subsurface habitability of a planet is correct?

- A) both surface and subsurface habitability can be determined only from robotic space probes
- B) surface habitability can be determined remotely by studying reflected starlight from a planet, while determining subsurface habitability would require a robotic space probe
- C) both surface and subsurface habitability can be determined by analyzing reflected starlight
- D) subsurface habitability can be determined remotely by studying reflected starlight from a planet, while determining surface habitability would require a robotic space probe

Answer: <https://biology-forums.com/index.php?topic=749041>

Question 17

Kepler's Third Law of planetary motion states that

- A) the further a planet is from the Sun, the faster it moves in its orbit
- B) an imaginary line joining the Sun and planet sweeps out equal areas in equal times
- C) the further a planet is from the Sun, the slower it moves in its orbit
- D) the orbits of planets are ellipses

Answer: <https://biology-forums.com/index.php?topic=748231>

Question 18

What do we mean by the half-life of a radioactive isotope?

- A) it is the amount of time a person can be exposed to radiation without getting sick
- B) it is the time for half the number of radioactive nuclei to become stable nuclei
- C) it is the amount of time for half of the nuclei to become radioactive
- D) it is the time for half the number of radioactive nuclei to decay

Answer: <https://biology-forums.com/index.php?topic=748440>

Question 19

Using current spacecraft, how long would it take to reach the nearest stars?

- A) hundreds of thousands of years
- B) millions of years
- C) only a few years
- D) thousands of years

Answer: <https://biology-forums.com/index.php?topic=748185>

Question 20

If we were to detect radio and TV signals that had leaked out into space from another civilization, this would be an example of

- A) a signal used for communication between a civilization's home world and another star system
- B) a signal used for communication between a civilization's home world and another planet in its own planetary system
- C) a signal used for local communication in the world where the intelligent beings exist
- D) an intentional signal beacon

Answer: <https://biology-forums.com/index.php?topic=749247>