space.fm

Planetary Formations Quiz

- 1. The moons of Mars are thought to be an example of ..?
- a) A satellite formed in the same area of space as the planet
- b) A satellite captured by the planet
- c) A satellite formed from the debris from an impact with the planet
- 2. Our Moon is thought to be an example of ..?
- a) A satellite formed in the same area of space as the planet
- b) A satellite captured by the planet
- c) A satellite formed from the debris from an impact with the planet
- 3. The Roche Limit is ..?
- a) The line where one body approaching an large one will be torn apart
- b) The maximum size of a white dwarf star
- c) The area where a body can co-orbit another
- 4. Lagrangian Points are ..?
- a) Planetary orientations
- b) Orbiting bodies that share a time ratio in their orbits
- c) Locations relative to two bodies where a smaller object can maintain a position in orbit
- 5. Tidal Gravitational forces are responsible for..?
- a) Ring systems around planets
- b) Asteroid Belts
- c) Internal Heating of moons
- 6. Jupiter's Galilean Moons are thought to be an example of .?
- a) A satellite formed in the same area of space as the planet
- b) A satellite captured by the planet
- c) A satellite formed from the debris from an impact with the planet

7. True or False? Earth and other planets and moons in the solar system have been (and are still) hit by objects like meteors, comets and asteroids?

a) True

b) False

8. Why is it difficult to detect exoplanets ..?

a) They are far away

b) The light from the parent star is very strong

c) They may not cross our line of sight from Earth

9. Radial velocity is a method to find exoplanets by ..?

a) Measuring the tiny wobble of a star caused by the pull of a planet

b) Measuring changes in the light from a star as a planet moves in front

c) Measuring changes in the movement of a star towards and away from Earth using the Doppler effect

10. Transit methods are used to find exoplanets by ..?

a) Measuring the tiny wobble of a star caused by the pull of a planet

b) Measuring changes in the light from a star as a planet moves in front

c) Measuring changes in the movement of a star towards and away from Earth using the Doppler effect

11. Astrometry is a method to find exoplanets by ..?

a) Measuring the tiny wobble of a star caused by the pull of a planet

b) Measuring changes in the light from a star as a planet moves in front

c) Measuring changes in the movement of a star towards and away from Earth using the Doppler effect

12. The habitable zone is also known as ..?

a) The Snow White zone

b) The Goldilocks zone

c) The Cinderella zone

- 13. The habitable zone is an area where..?
- a) Humans can build dwellings
- b) Water can exist as a liquid on its surface
- c) It doesn't get very cold
- 14. True or False? Other stars have habitable zones
- a) True
- b) False
- 15. Scientists usually look for life elsewhere in the solar system where..?
- a) On terrestrial planets and moons
- b) There is evidence of past or present water.
- c) It is nice and warm
- 16. Which is NOT considered a theory for the origin of water on Earth..?
- a) Condensation when Earth formed
- b) Delivery from a comet
- c) From a collision with the Moon
- 17. The Drake equation is a way to ..?
- a) Measure the habitable zone on an exoplanet
- b) Estimate how many intelligent alien life forms exist that we could communicate with
- c) Count the number of male ducks on a pond
- 18. Which of these is a reason why contacting intelligent alien life is NOT a good idea..?
- a) Intelligent life may share knowledge about science that we have yet to discover
- b) Intelligent life may share advances in technology such as travel and communication.
- c) Alien forms of life could create new bacteria capable of killing all life

Answers

- 1. (b)
- 2. (c)
- 3. (a)
- 4. (c)
- 5. (a) (b) (c)
- 6. (a)
- 7. (a)
- 8. (a) (b) (c)
- 9. (c)
- 10. (b) (c)
- 11. (a)
- 12. (b)
- 13. (b)
- 14. (a)
- 15. (b)
- 16. (c)
- 17. (b)
- 18. (c)