

## What a Planet needs to sustain life video questions

[https://www.ted.com/talks/dave\\_brain\\_what\\_a\\_planet\\_needs\\_to\\_sustain\\_life?referrer=playlist-what\\_makes\\_earth\\_so\\_special#t-3350](https://www.ted.com/talks/dave_brain_what_a_planet_needs_to_sustain_life?referrer=playlist-what_makes_earth_so_special#t-3350)

1. Earth is the only place that has \_\_\_\_\_, 8.7 million species.
2. All living things need \_\_\_\_\_,  
\_\_\_\_\_, \_\_\_\_\_
3. Many solar system bodies don't have \_\_\_\_\_ water.
4. Three solar system bodies with liquid water on the surface of the planet is \_\_\_\_\_, Earth, and \_\_\_\_\_
5. Venus has no liquid water because the atmosphere is too \_\_\_\_\_ and \_\_\_\_\_. Mars has no liquid water is because the atmosphere is too \_\_\_\_\_ and \_\_\_\_\_.
6. True or false: Planets and atmospheres can change and evolve over time.
7. How do scientists know that Mars once had liquid water?  
\_\_\_\_\_  
\_\_\_\_\_
8. All planets have an atmosphere that \_\_\_\_\_ into space over time.
9. How do atmospheres get their energy for escape? Sunlight given atmospheric particles enough energy to \_\_\_\_\_ free from the gravity of the planet. A second way to get energy is from \_\_\_\_\_ wind.
10. \_\_\_\_\_ are particles, mass, material that are spit out from the surface of the \_\_\_\_\_.
11. \_\_\_\_\_ from the Sun determines a planets temperature.
12. Earth has a \_\_\_\_\_ and Venus and Mars do not.
13. Magnetic fields are generated in the deep interiors of planet by \_\_\_\_\_ conducting churning of \_\_\_\_\_ material.

14. Scientists believe that a magnetic field serves as a \_\_\_\_\_ for the atmosphere, deflecting solar wind particles around the planet.
15. As a result of Earth's magnetic field \_\_\_\_\_ has not been able to escape. Mars's atmosphere has not been protected because it has no \_\_\_\_\_ field.
16. How do we know energy is being deposited on Earth from space?  
\_\_\_\_\_
17. What does the MAVEN spacecraft measure on Mars?  
\_\_\_\_\_
18. The Kepler spacecraft has been observing a postage-stamp size area of the sky and has found \_\_\_\_\_ of planets.
19. Based on Kepler's data, scientists do not believe that out of the 200 billion stars in the Milky Way galaxy, on average every star has at least \_\_\_\_\_ planet.
20. Between \_\_\_\_\_ billion and \_\_\_\_\_ billion of those planets scientists would define as \_\_\_\_\_.