

LEAP INTO ENGLISH

TOEFL PREPARATION COURSE

Reference words – Practice.

Choose the correct word each underlined word is referring to.

1. As we discover more planets that are similar in size to Earth, the possibility of finding one that is habitable is becoming more likely.
a planet **b** size **c** Earth
2. Some planets may have reservoirs of water or ice beneath their surface where life may exist.
a planets **b** reservoirs **c** water or ice
3. Scientists have developed many large telescopes for hunting planets. There are three major ones that are used to locate exoplanets.
a scientists **b** telescopes **c** planets
4. The Kepler telescope transmits data for 100,000 stars. This enables scientists to study multiple stars at once.
a telescope **b** data **c** transmits data for 100,000 stars
5. Even if life forms existed on other planets, an asteroid collision or any number of other disasters may have destroyed them.
a life forms **b** planets **c** disasters

WORD BUILDING

The prefix *tele-* means far away. A *telescope* is an instrument that sees faraway objects. Use your dictionary to find out what these words mean: *teleport*, *telecommunications*, *teleworking*.

Reading Comprehension Practice.

Searching for Exoplanets

The possible discovery of life on other planets has been one of the most tantalizing and challenging questions for science and one that recent advances in scientific space technology have brought closer to reality. The search for exoplanets – planets outside our solar system – is one of the newest and most exciting developments in the field of astronomy.

Previously, scientists were only able to find large hot planets that orbit their star within a very close range. These planets are so hot that there is very little likelihood of finding life on them. Larger and more powerful telescopes are now enabling scientists to track down smaller exoplanets. The aim is to find planets that are similar in size to Earth and are in a habitable zone. This means that their orbit does not take them so close to the sun that they are extremely hot and not so far away that they do not get enough heat or light for life to form.

One problem in detecting planets is that they do not emit any light, so it is difficult to observe them directly. Telescopes, such as the Kepler telescope launched by NASA in 2009, observe thousands of stars constantly. One method of locating planets is the transit method. When a planet orbits a star, some of the starlight is blocked by the planet, so the star appears to dim slightly. When this occurs at regular intervals, it establishes the presence of a planet. This method can be used to measure the planet's size and mass.

The first exoplanet that is similar to the size of Earth was found in 2011. Named Kepler 20-e, it has a radius of approximately 0.87 times that of Earth and has a rocky surface, just like Earth. Its orbit is very close to its star and takes just 6.1 days. For this reason, it is extremely hot and does not have the conditions to support water or life.

In the coming years, scientists predict that it is very likely that telescopes will discover more planets that are Earth-analogues, and it is possible that some of them will be in the habitable zone.

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1. What does **one** refer to in paragraph 1?
 - ☐ discovery
 - ☐ life
 - ☐ planet
 - ☐ question
2. What does **this** refer to in paragraph 2?
 - ☐ to find planets
 - ☐ a similar size to Earth
 - ☐ in a habitable zone
 - ☐ not too hot
3. What does **this** refer to in paragraph 3?
 - ☐ The planet is observed by telescope.
 - ☐ The presence of a planet
 - ☐ The planet orbits the star.
 - ☐ The star becomes less bright.
4. What does **this reason** refer to in paragraph 4?
 - ☐ It is smaller than Earth.
 - ☐ Its orbit is six days.
 - ☐ It travels close to its star.
 - ☐ It has a rocky surface.
5. All of these are true of the Kepler telescope EXCEPT
 - ☐ it observes many stars and planets.
 - ☐ it records any decrease in light from stars.
 - ☐ it can estimate the size of a planet.
 - ☐ it observes planets directly.
6. Which is closest in meaning to the highlighted word in paragraph 5?
 - ☐ They can be reached from Earth.
 - ☐ They are like Earth.
 - ☐ They are near to Earth.
 - ☐ They are habitable.