Name _____ Word Count: 280

Exoplanets

Recently, scientists discovered a giant exoplanet (a planet outside our solar system) orbiting around a distant star. This huge planet is eleven times the size of Jupiter, but it is still much smaller than its parent star. How do scientists find these distant objects? 8 17 29 40 44

Exoplanets are often difficult to spot because they are much less bright than their parent stars. In order to see an exoplanet, astronomers need to block the light of the parent star. This means that usually we can only see exoplanets that are very large, very hot, and orbiting far away from their parent stars. These types of exoplanets are often "gas giants" that are much larger than Jupiter. 53 65 75 85 96 105 113

However, it's also possible to discover exoplanets by seeing the effect they have on the objects around them. For example, exoplanets can cause small changes in the speed at which a star moves toward or away from the Earth. Scientists can find exoplanets by measuring these changes. 121 131 140 152 160

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Exoplanets

Name _____ Word Count: 280

Scientists can also sometimes spot exoplanets as they pass in front of their parent stars, causing a slight dimming of the star's light. Because exoplanets are so difficult to see directly, these clues make finding them much easier.

By searching in these ways, scientists have already discovered more than one thousand exoplanets. As technology improves, they expect to discover many more.

A few of the exoplanets we know about are similar to Earth in some ways. For example, some have clouds with water in their atmospheres. Others are Earth-sized and orbit their stars at a distance similar to Earth's distance from the Sun. Could any of these planets support life as we know it? Scientists don't yet have the answer.

Number of Errors | 1 | 2 | 3 | 4 | 5 | 6 |

Accuracy (%): _____

Reading Rate (Words Per Minute):

TARGET

100 110 120 130 140 150 **160** 170 180 190 200 210 220

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