

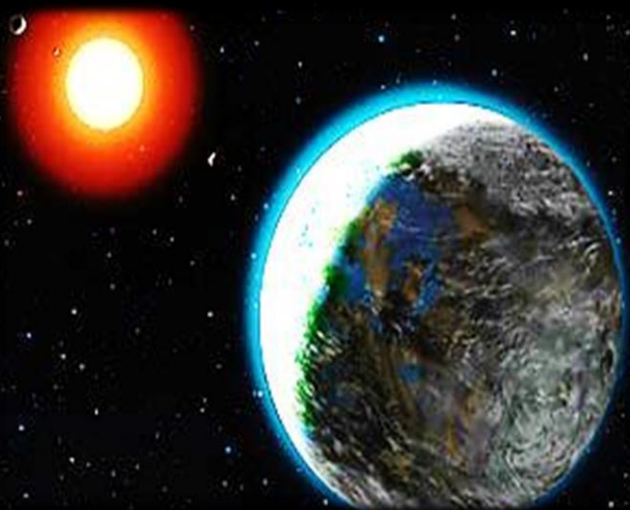
The New Earth

Scientists are finding more and more planets that could be similar to the Earth. Estimations of the number of Earth-like planets in the galaxy vary from one (i.e. the Earth) to billions. Current information indicates that Earth-like planets may be relatively common in the universe.

NASA categorizes Earth-like planets using a measure called the Earth Similarity Index (ESI). The ESI is based on mass, radius and temperature. According to the ESI measure, the most similar planet to Earth is Gliese 667C (ESI=0.85). This planet is closer to its sun than the Earth and has a year that lasts 92 days.



On January 7, 2013, scientists from the Kepler Mission Space Observatory discovered KOI-172.02. This is an Earth-like planet near a star that is similar to our Sun. KOI-172.02 is more distant from its sun, but importantly, it is not too hot or too cold. Perhaps in the future KOI-172.02 may be a new home for humans. However, it will take a lot of time before we find out because it is 1040 light years away!



A picture of what KOI-172.02 might look like.

Article adapted from Wikipedia, 2013: http://en.wikipedia.org/wiki/Earth_analog

Comparatives and Superlatives

Directions: Change the adjective in parentheses to comparative or superlative. Make sure your answers agree with the information given to you in the reading. You will need to use your critical thinking skills to complete some of these sentences. Be prepared to provide evidence from the reading to support your answer.



Earth (left) the Giliese 667C (right)

- The creation of (example) _____ telescopes has allowed scientists to see _____ into space.
- Giliese 667C is the _____ planet scientists have found to our own planet Earth.
- Giliese 667C is three times _____ than planet Earth.
- Planet Earth is a little _____ than the Giliese 667C.
- Planet Earth is _____ to its sun than KOI-172.02.
- Scientists found the new planets _____ than they thought they would find them.
- The new planets provide the _____ evidence for having some kind of life on it because they are located in the life supporting zones.
- Because they found the “new earths” so quickly, scientists believe that planets like our own planet Earth are _____ than they thought they were.
- Some scientist feel that answering the question, “Is there life on other planets?”, is the _____ scientific question that still needs to be answered.
- The possibility of finding life on other planets is _____ than it has ever been before.



Paragraph Completion

Directions: Use what you have read in "The New Earth" to help you complete the paragraph. Use the proper form of the verb in parentheses to complete the paragraph.

Right now, scientists _____ (search) for more planets similar to the planet Earth. In January 2013, they _____ (find) one planet that is similar to our planet Earth. They _____ (name) the planet, KOI-172.02. Scientists _____ (hope) to find other life forms in the near future. Another name for "other life forms" _____ (be) "aliens." Movies and television programs often _____ (show) human beings meeting aliens. In the future, this might _____ (not, be) fantasy anymore but reality.

Scientists _____ (believe) that if a planet has water than it probably has some kind of life on it. Presently, scientists _____ (try) to find a way to travel to the new earth-like planets. Scientists _____ (understand) that the new planets are very far away but a trip _____ (help) us learn a lot about whether or not there is life on the planet. If we _____ (be) able to travel to KOI-172.02, the information we _____ (get) from the trip _____ (teach) us a lot about our development here on planet Earth.



At this moment, scientists _____ (work) on a plan to send a machine to the new planets to explore the environment. This machine in the future _____ (collect) soil and air samples from the planet. The machine _____ (send) back information about the soil and air to scientists here on planet Earth. Information about the soil and air on planets always _____ (tell) scientists about whether or not life can exist on the planet.