

Main Reading

私達にとって身近な天体である月ですが、そもそも月はどのようにして誕生したのでしょうか。この講では、月の起源について学んでいきましょう。

次の英文を読んで、設問に答えよ。

For thousands of years, people have looked up at the night sky and looked at the moon. They wondered what the moon was made of. They wanted to know (1-a) big it was and (1-b) far away it was. One of the most interesting questions was “Where did the moon come from?” No one knew for
5 sure. Scientists developed many different theories, or guesses, but they could not prove ⁽²⁾that their ideas were correct.

Then, (3-a) 1969 and 1972, the United States sent astronauts (3-b) the moon. They studied the moon and returned to Earth (3-c) rock samples. Scientists have studied these pieces of rock, the moon’s movements
10 and information (3-d) the moon and the earth. They can finally answer questions about the origin of the moon.

Today most scientists believe that the moon was formed from the earth. They think that a large object hit the earth early in its history. Perhaps the object was as big as Mars. When the object hit the earth, huge pieces of the
15 earth broke off. These pieces went into orbit around the earth. After a brief time, the pieces came together and formed the moon.

⁽⁴⁾This “impact theory” explains many facts about the earth and the moon. For example, ⁽⁵⁾the moon is very dry because the impact created so much heat that it dried up all the water. The earth has iron in its center. However, the
20 moon has very little iron in its center. This is because the moon was formed from lighter materials that make up the outer part of the earth. Finally, the earth and the moon are almost the same age: the earth is about 4.5 billion years old, and the moon is about 4.4 billion years old.

No one can prove that something really happened billions of years ago. ⁽⁶⁾In the future, new information will either support this theory or show that it is wrong. For now, scientists accept this impact theory because it explains what
25 we know today about the earth and the moon.