

Earth, Sun and Moon

Outstanding Science Year 5 - Earth and space - OS5D003



National Curriculum Statutory Requirements

5D2 - describe the movement of the Moon relative to the Earth

Learning Objective

I can explain how the Moon moves.



Me:   

Teacher:   

The Moon

The Moon is the only natural satellite of Earth. It orbits the Earth approximately once every 30 days. It is clearly visible to the naked eye from the surface of the Earth. The rotation of the Moon and its orbit mean that one side of the Moon always faces Earth, and the other faces away.



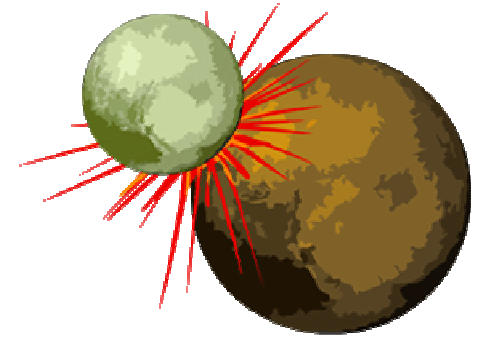
Exploration of the Moon

Since the 1950s, humans have sent robotic spacecraft to explore the Moon. 1969, the Apollo 11 mission landed 2 humans on the Moon. The Moon is the only body other than the Earth that has had humans on its surface.

How was the Moon formed?

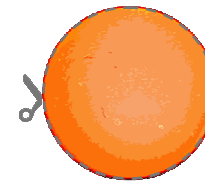
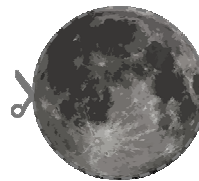
There have been lots of different theories about how the Moon was formed. Some astronomers thought that the Moon and the Earth formed near to each other at the same time. Some astronomers thought that it formed elsewhere and was captured by the Earth's gravity and ended up in orbit around it.

The most accepted hypothesis is that about 4.5 billion years ago, when the solar system was young, the Earth was hit a glancing blow by a body the size of Mars, which has been named **Theia**. This knocked material off the Earth and into orbit around it. This material eventually clumped together due to its own gravity and formed the Moon. The evidence supporting this idea includes the fact that the Moon is made of very similar materials to the Earth.



Activity

Use the information on this page to create a report on the Moon on the following page. Carefully cut out the pictures of the Earth, Sun and Moon and use them to complete the diagram showing how these bodies move.



Discussion

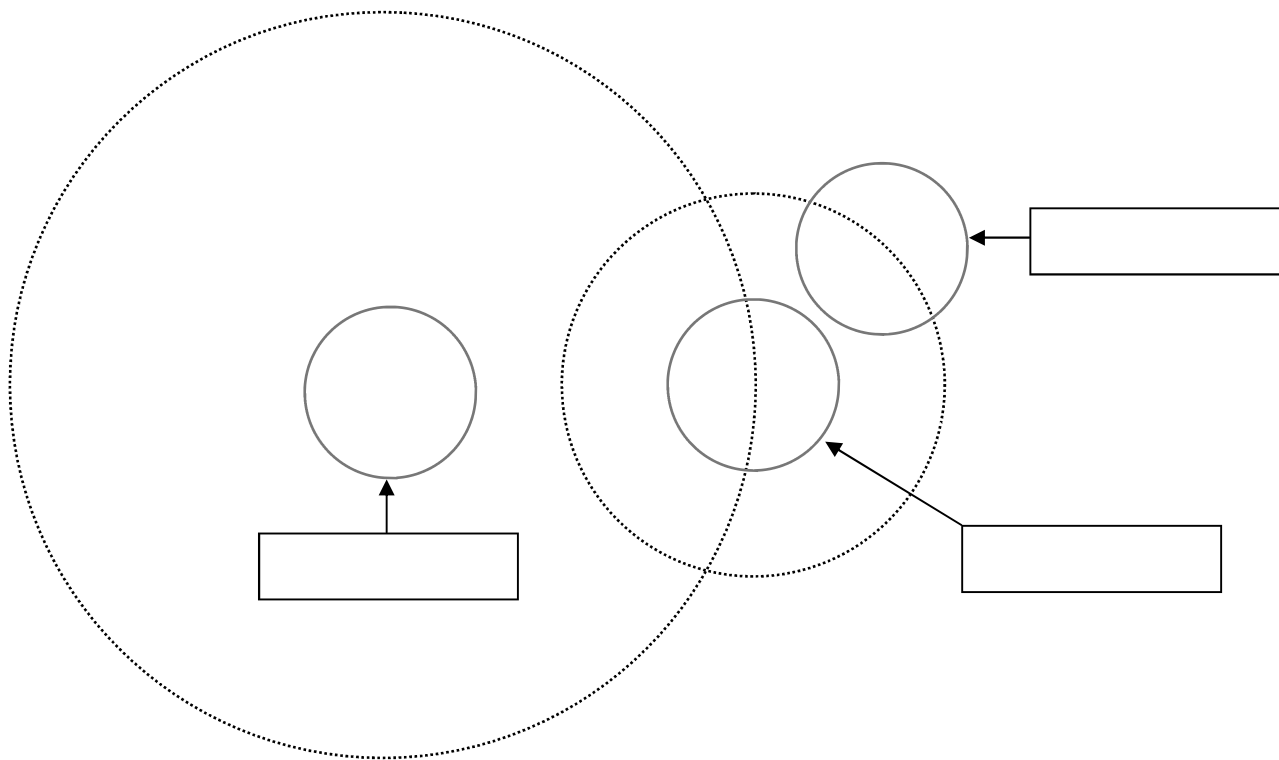
Sometimes we look at the Moon and see a full moon, a crescent, or nothing at all. Why is this? The Moon and the Sun look approximately the same size when viewed from Earth. Why is this?

The Moon

Diagram showing the orbits of the Earth, Sun and Moon (not to scale)

How do the Earth and Moon move?

Handwriting lines for the text 'How do the Earth and Moon move?'



How was the Moon formed?

Handwriting lines for the text 'How was the Moon formed?'

Has the Moon been explored?

Handwriting lines for the text 'Has the Moon been explored?'