



## The many phases of the Moon

### Background knowledge

Did you know that the Moon is not a source of light? The light from the Moon is actually reflected light from the Sun. The Moon orbits around Earth in about 28 days. Depending on which part of its orbit it is in, you can see either a whole, round Moon reflecting light or just part of it. The different shapes you see of the Moon in the evening sky are known as the *phases of the Moon*.

The Moon's changing appearance during one month as seen from Earth.



### Science activity

The chart below shows how the Moon appears from Earth. Can you work out the missing shapes, and complete the chart below?

Date in January	Moon's appearance
1st	●
6th	○
12th	○
18th	○
24th	
28th	

### Science investigation

You can model the way the Moon appears as it orbits Earth. Use a flashlight to represent the Sun and a ping-pong ball for the Moon. Ask a friend to hold the flashlight still in a darkened room. Hold the ball at arm's length in front of the flashlight. Turn around slowly in a circle, keeping your eyes fixed on the ball. Can you see the reflection of the light on the ball? How does it compare to the phases of the Moon?

