

# Know your vocabulary



**appearance:** the way something looks

**appearance** The appearance of something is the way it looks. For example, a person's appearance is how that person looks.



a magnet **attracts** paper clips

**attracts** If something is able to attract something else, it makes that thing come closer to it. For example, a magnet attracts metal objects.



A volcano has a **crater**.

**craters** A crater is a hollow in the surface of something – often in the shape of a bowl. The opening of a volcano is a crater.



**Gravity** causes apples to fall to the ground.

**gravity** Gravity is the force that causes things to stay on Earth. Gravity stops everything on Earth from floating into space and it is why things fall after being thrown or dropped.



an impression of a **meteorite**

**meteorites** A meteorite is an object from space, such as a piece of rock, that falls onto Earth. Sometimes meteorites hit the moon.



**phases** in a frog's life

**phases** A phase is a stage that something goes through for a period of time. For example, there are different phases in the life cycle of a frog, from being an egg, to a tadpole, to an adult frog.



The **tide** is out.

**tides** A tide is the rise and fall of water in oceans and rivers. Tides happen at similar times each day. For example, in the morning, water might be high on a beach during high tide. In the afternoon, the water might be a long way out during low tide.

# The moon: a ball-shaped rock

The moon is a ball-shaped rock that travels around the Earth. As the moon spins around the Earth, its **gravity attracts** the water in the ocean. This causes the water to move in different directions, creating **tides**. The dark and light parts that can be seen on the moon are actually mountains and **craters** on its surface. The light areas are mountains and the dark areas are craters. Scientists have not found any evidence of life on the moon.

## Where did the moon come from?

Some scientists say that the moon was created when a rock the size of Mars crashed into the Earth millions of years ago. Pieces of rock flew back into space and gathered to form the moon. Scientists think that the moon has been orbiting the Earth for about 4.5 billion years.

## The moon does not change

The moon has no atmosphere, so it has no weather. The surface of the moon has changed very little over time, as there is no wind or running water to cause erosion. **Meteorites** that sometimes hit the moon cause changes to its surface.



## Phases of the moon

The moon's shape is always round, but its **appearance** changes. Sometimes the moon appears to be a full circle. At other times, it is a thin crescent of light. These changes are known as **phases** of the moon. The changes occur because the moon does not make any light of its own. Instead, the moon reflects the sun's light as it moves around the Earth. We only ever see one side of the moon.

