

Why does the moon change shape?

The moon is a sphere but why doesn't it appear spherical all the time? Before looking at the answer, we first need to look at how the Moon, the Earth and the Sun are connected.

How are they connected?

The Moon rotates around the Earth and takes approximately 27 days to orbit it (to go around). This happens all the time and often we don't realise it.

Similarly, the Earth orbits the Sun. It takes approximately 365 days for the Earth to rotate around the Sun. This is because the Sun is a lot bigger and more time is needed to go around it.

Whilst this is happening, the Sun illuminates (lights up) some parts of the Moon. Generally, the part of the Moon that is lit up is visible to people on Earth.



This shows how the Moon looks during the different positions of the orbit around the Earth.

This is why the moon doesn't often appear spherical or the same shape when we look at the sky during the night.