

# The lunar cycle

Outstanding Science Year 5 - Earth and space - OS5D004




National Curriculum Statutory Requirements

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

## Learning Objective



I can explain how the Moon's appearance appears to change when viewed from the Earth.

Me:   

Teacher:   

We use the words 'waxing' (getting bigger) and 'waning' (getting smaller) in our descriptions of the phases of the Moon. The Moon takes approximately 30 days to complete its orbit around the Earth, after which the lunar cycle repeats itself.

## The lunar cycle

The Moon is not a light source. It does not create its own light. We can only see the Moon because it reflects light from the Sun. At any one time, half of the Moon is being lit by the Sun, and half of it is in darkness. As the Moon orbits the Earth, we can see all, some, or none of the side of the Moon which is being lit by the Sun at that time. This causes the Moon's appearance to change, as viewed from the Earth. We call this change in appearance the **phases of the Moon**.

## Activity

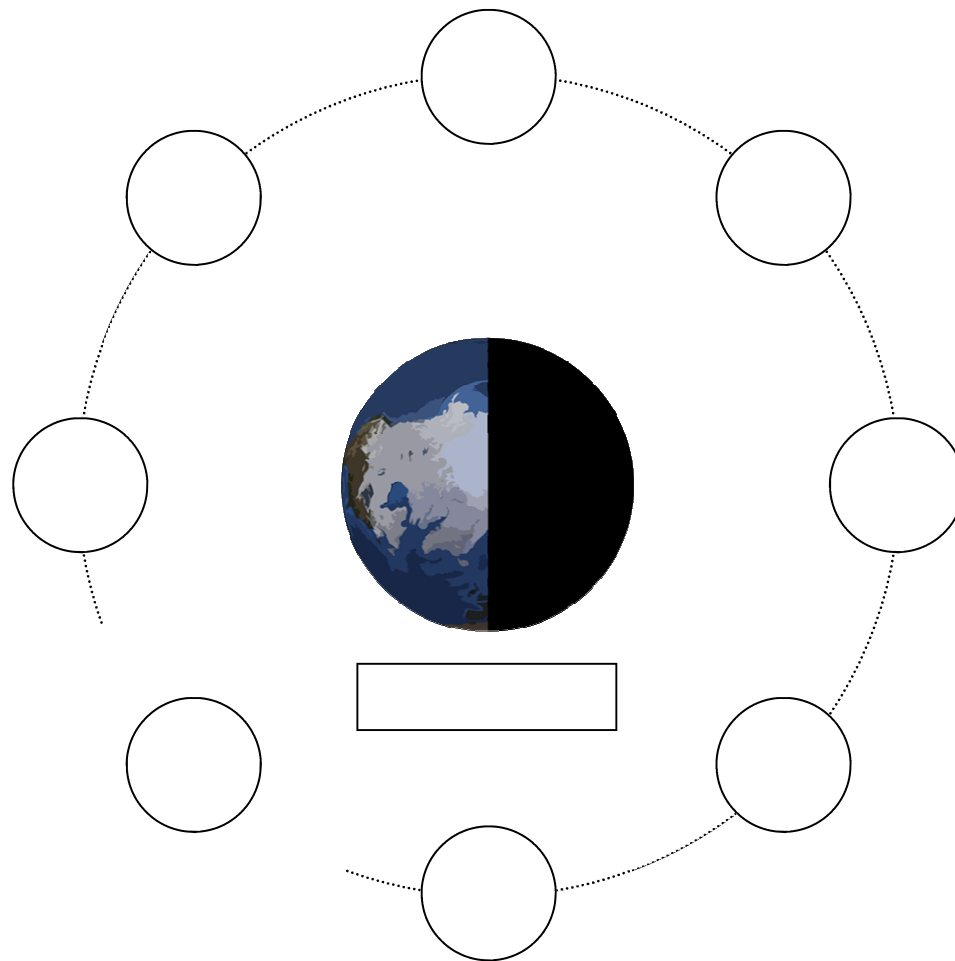
On the following page, you will find a diagram showing the lunar cycle. It shows the Moon at eight different points in its orbit around the Earth. Use a black pencil to colour in the half of the Moon which is not being lit by the Sun at the eight different points. Next, cut out the pictures and descriptions of the phases of the Moon. Carefully add them to the diagram, matching each phase to how the Moon appears from Earth at each point in its orbit.



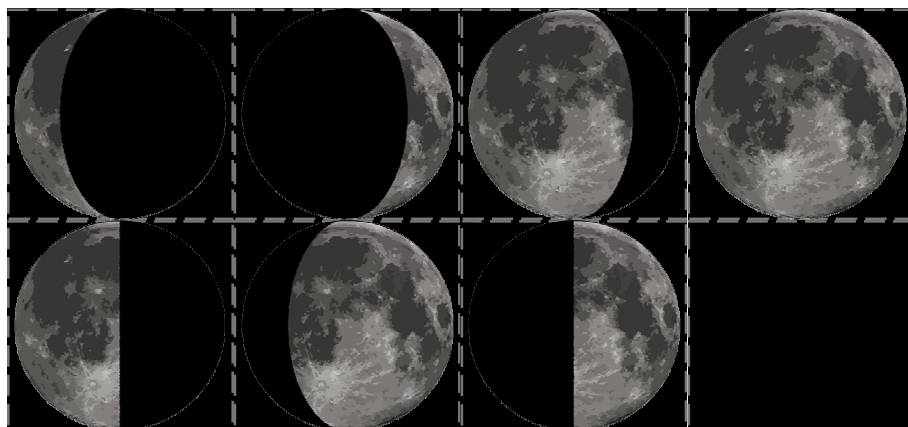
<b>New Moon</b> We cannot see any of the lit side of the Moon.	<b>Waxing crescent</b> We can see a small sliver of light.	<b>Half Moon</b> We can see half of the lit side of the Moon.	<b>Waxing gibbous</b> We can see almost all of the lit side of the Moon.	<b>Full Moon</b> We can see all of the side of the Moon lit by the Sun.	<b>Waning gibbous</b> We can see almost all of the lit side of the Moon.	<b>Half Moon</b> We can see half of the lit side of the Moon.	<b>Waning crescent</b> We can see a small sliver of light.
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# The lunar cycle (not to scale)






The Moon's appearance as viewed from the Earth

Waning gibbous

New Moon

Half Moon

Waxing gibbous

Full Moon

Half Moon

Waxing crescent

Waning crescent



Waning gibbous

New Moon

Half Moon

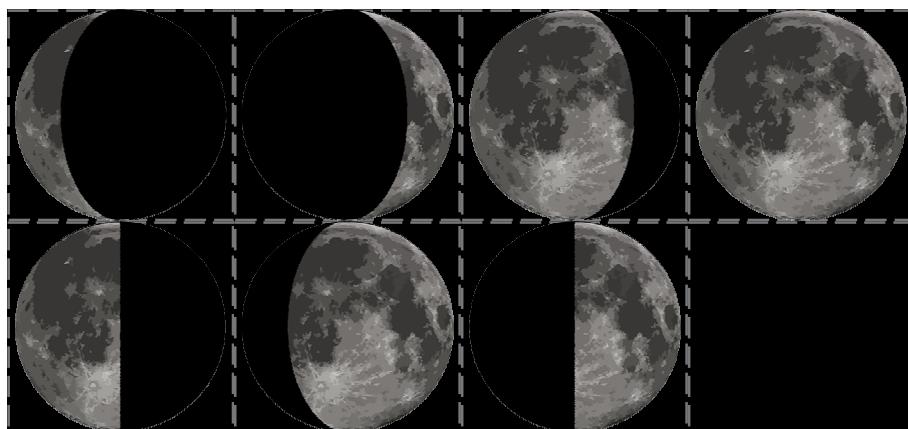
Waxing gibbous

Full Moon

Half Moon

Waxing crescent

Waning crescent



Waning gibbous

New Moon

Half Moon

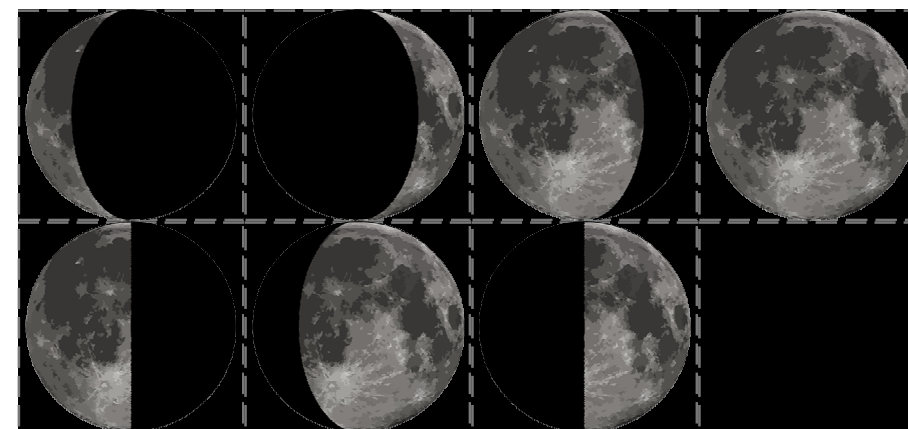
Waxing gibbous

Full Moon

Half Moon

Waxing crescent

Waning crescent



Waning gibbous

New Moon

Half Moon

Waxing gibbous

Full Moon

Half Moon

Waxing crescent

Waning crescent



Teacher's note: there are enough text and images on this page for 4 children, to save on printing and photocopying resources.

