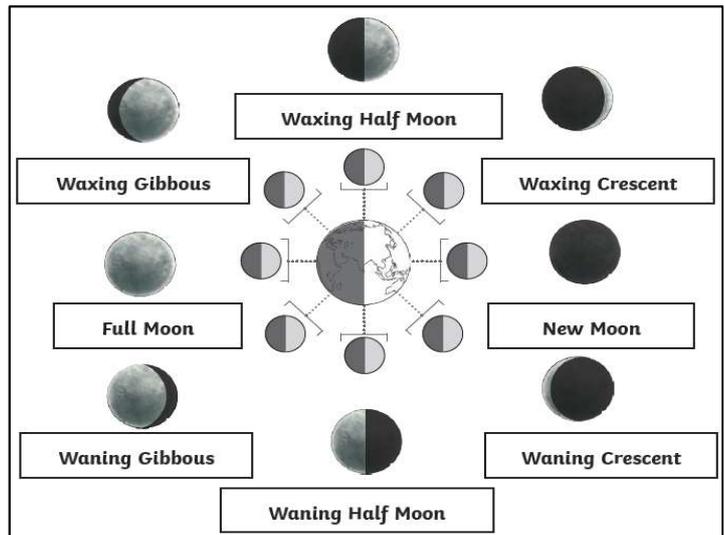


# Space and Light

This half term, Class 5 we will be exploring space and in particular the Moon and its relationship to Earth. We will also be investigation how light travels with a look at reflection, refraction and the colour spectrum.

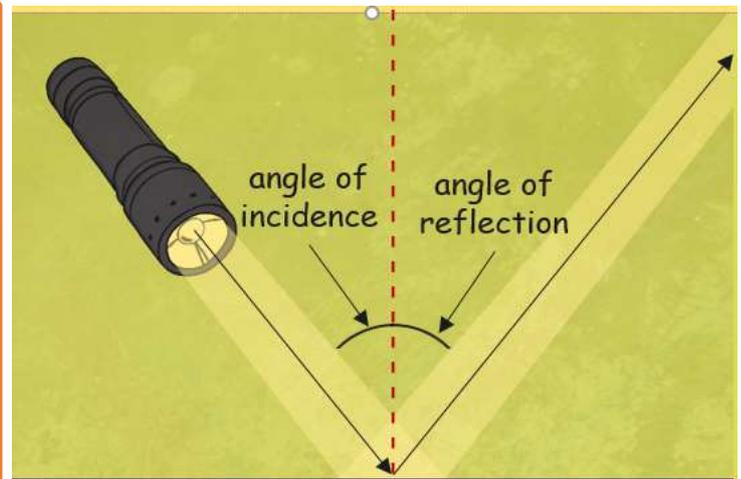
## The Moon

- The phases of the Moon are: New Moon, Waning Crescent, Waxing Gibbous, Waning Half Moon, Full Moon, Waxing Gibbous, Waxing Half Moon, Waxing Crescent.
- A lunar eclipse occurs when the Earth is between the Sun and the Moon.
- The Moon is very hot during the day but very cold at night.
- The Earth's tides are largely caused by the gravitational pull of the Moon.
- The USA's NASA Apollo 11 mission in 1969 was the first manned Moon landing.
- The first person to set foot on the Moon was Neil Armstrong.
- The Moon is the Earth's only natural satellite. A natural satellite is a space body that orbits a planet, a planet like object or an asteroid.
- It is the fifth largest moon in the Solar System.
- The average distance from the Moon to the Earth is 384403 kilometres (238857 miles).
- The Moon orbits the Earth every 27.3 days.
- The Moon rotates on its axis in around the same length of time it takes to orbit the Earth.
- The surface of the Moon features a huge number of craters from [comets](#) and asteroids that have collided with the surface over time.



## Light

- Light appears to travel in straight lines.
- Reflection is when light bounces off a surface, changing the direction of a ray of light.
- The angle of incidence is equal to the angle of reflection.
- Refraction occurs when light changes speed when travelling through different transparent materials.
- Objects are seen because they give out or reflect light into the eye.
- We see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.
- Shadows have the same shape as the objects that cast them.
- White light is made up of the colours of the rainbow merged together. We can separate them using a prism.



### Vocabulary

satellite	moon	crescent	lunar
earth	sun	gravity	light
shadow	energy		rotation/rotate
reflection/reflected	beam	incident	angle
prism	spectrum	refraction/refracted	