## Year 5: Space

## SPHERICAL BODIES

## How Many Planets Are There?

There are 8 planets in the solar system and several dwarf planets.


As objects get more and more massive, gravity forces them into a spherical shape. All planets and stars are (roughly) spherical because of this—even Earth! Notice how all 8 planets in our solar system are roughly the same shape.

## PHASES OF THE MOON



As you will remember from Year 3, the Moon does not emit its own light; it reflects it from the Sun. Depending on where it is in its orbit around the Earth, the Earth can block some of this light. This gives us a cycle of phases of the moon which repeat every four weeks.

## KEY VOCABULARY:

Planet:: spherical bodies large enough
for their gravitational field to dominate for their gravitational field to dominate the local region of space.

Solar System: Our own star, the Sun, along with all the planets, moons, and other objects that orbit around it.


Satellite: Objects that orbit around a planet. Some satellites are natural, like the Moon, and some are human-made, like the ones we send into space.


Orbit: The path that a planet or other object is held in by the gravitational force of the body it is going around.


Gravity: A force that pulls objects towards each other. The more massive something is, the more gravity it has.

Galaxy: A massive group of stars, gas, and dust held together by gravity. Our solar system is part of a galaxy called the Milky Way.

Spherical: Shaped like a sphere. A round 3D shape where every point on the surface is the same distance from the centre.

Lunar Phase: the portion of the Moon that is visible from Earth due to the Sun's light.

## SPACE RACE



During the second half of the 20th Century the United States and the USSR (Russia) competed to see who could get further in space travel.

Several animals were sent up to test if space travel was even possible for living things, before Laika became famous as the first dog to orbit the Earth. Soon after this, Yuri Gagarin became the first man in space.

The final stage of the space race came in 1969 when the Apollo 11 mission landed 2 American astronauts (Neil Armstrong and Buzz Aldrin) on the Moon.

