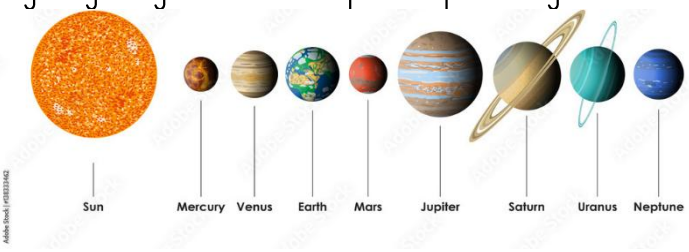
Year 5 Science Physics: Space

Vocabulary

Tier 1	Tier 2	Tier 3
Star, Rotate, Planet, Moon, Sun, Sphere, Earth, Gas, Day, Night, Shadow, Heat, Light, East, West	Solar System, Orbit, axis, phases, waxing, waning, crescent, Gibbous, Gravity, Model	Dwarf Planet Galaxy Milkyway

The Solar System

'My Very Easy Method Just Speeds Up Naming'



- The sun is a star (which releases heat and light) and at the centre of our solar system.

The motion of the earth and the planets

- The planets orbit the sun on their different orbit paths.
- All planets orbit the sun on the same plane.
- The sun is the largest object in the solar system and has the greatest gravitational pull, this keeps all the planets in orbit around the sun.
- Planets take different amounts of time to complete a full orbit around the sun.

Solar system – ideas over time.

- Ptolemy was an astronomer (100AD-170AD)
- Ptolemy's model showed that the earth was at the centre of the solar system with the sun and the planets orbiting around it (Geocentric Model).
- Copernicus was an astronomer (1473-1543)
- Copernicus' model showed the earth along with the other planets orbited the sun, but his theory took more than 100 years to be accepted (Heliocentric model)

Planet Earth and Night and Day

- Ancient Egyptians, Greeks and Vikings believe that the Earth was flat.
- Pythagoras introduced the idea that the Earth was spherical.
- Earth spins on its axis and one rotation takes 24 hours. As the earth spins on its axis, it rotates around the sun.
- Sun rises in the East and sets in the West – shadows are longer at sunrise and sunset.
- When part of the earth faces the sun it is day time, when part of the earth faces away it is night time.

The Moon

- The moon orbits the Earth.
- The Earth and the moon spin at almost the same time.
- The moon takes approximately 29.5 days to rotate the earth.
- The moon doesn't shine, sunlight illuminates the moon and this light is reflected to earth.
- The moon's shape appears to change as it orbits the earth.

