

# Year 5 - Earth and space

## Which planet would you like to live on?

### Prior learning

In Year 1, you observed changes in the four seasons and the effects of shadows.

### Future learning

In secondary school, you will learn more about the Earth's orbit and rotation, as well as other planets.

### In this unit you will:

- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- Describe the movement of the Moon relative to the Earth
- Describe the Sun, Earth and Moon as approximately spherical bodies
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky

### Key Scientists: Dr Mae Jemison & Neil deGrasse Tyson

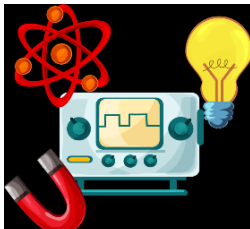


Dr Mae Jemison was the first African American woman to go into space. Before she became an Astronaut, she was also a medical doctor!

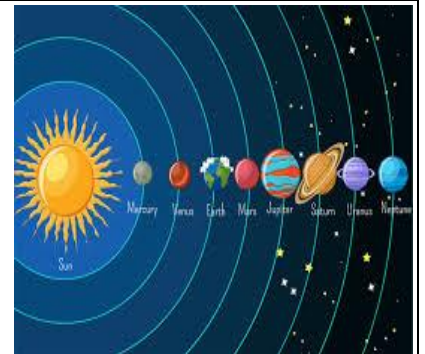
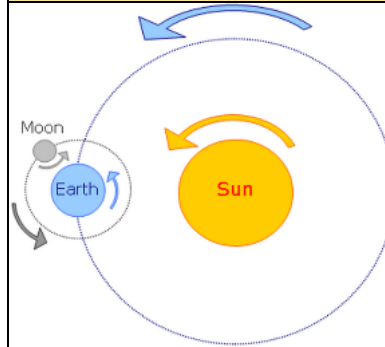
Neil deGrasse is an American astrophysicist and planetary scientist. He appears on TV to explain about space, is the director at the famous Hayden Planetarium and argued for reclassifying Pluto as a dwarf planet.

### Science discipline: *Physics*

**Physics** is a science that studies matter and its motion as well as how it interacts with energy and forces.



### Scientific diagrams



### Vocabulary:

- **The Milky Way:** Our solar system is called, 'The Milky Way'. The Sun is the most powerful star at the centre of our solar system. There are eight planets in our solar system: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.
- **Orbit:** A regular, repeating path that one object in space takes around another one.
- **Rotate:** Means to spin around an axis.
- **Axis:** A real or imaginary line through the centre of an object, around which the object turns.
- **Geocentric model:** The Sun, the Moon, and each planet orbit a stationary Earth.
- **Heliocentric model:** The idea that the Earth and other planets revolve around the Sun, which is the centre of the solar system.
- **Astronomers:** Someone who study planets, the moon and the stars.