

# Knowledge Organiser - Science (Chemistry) - Year 5- Spring 2 2025

## Reversible and irreversible changes



### STICKY KNOWLEDGE

The four planets closest to the Sun are terrestrial planets; after the asteroid belt are the gas and ice giants.	The Earth rotates around its own axis; half of Earth's surface is faces the Sun while the other experiences night.	The Earth is not stationary in Space. It orbits the Sun and spins on it axis.
The Earth tilts on its axis to give our seasons. Tilting towards the Sun in Summer and away to give us Winter.	We see different phases of the Moon as it orbits the Earth in a circular path.	Not all countries face the sun at the same time; this gives us different time zones.

### KEY VOCABULARY

Orbit	Path followed by a planet (or other body) as it moves around another planet or star.
Terrestrial Planet	The name given to the 4 inner planets - Mercury, Venus, Earth and Mars.
Solar System	The name for the Sun and all the planets, dwarf planets, asteroids, meteors and comets that orbit it.
Axis	The (imaginary) line which a planet rotates around and tilts on.
Astronomy	The study of space, planets and the universe as a whole.

### The Solar System

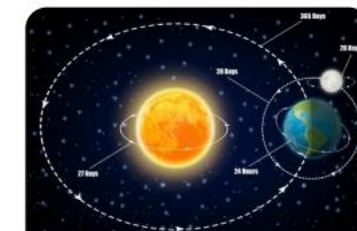


Mercury  
Venus  
Earth  
Mars  
Jupiter  
Saturn  
Uranus  
Neptune

Copernicus developed the heliocentric theory that the sun was at the centre of the solar system. The planets orbit the sun in a circular pattern. Each planet has its own characteristics and features. The four inner planets are the rocky terrestrial planets. The four outer planets are the gas giants.

### Earth's movement

The Earth spins on its axis and completes a full rotation every 24 hours. The Earth is constantly rotating and orbiting the Sun - which takes 365 days. As the Earth rotates, it faces towards and away from the Sun. This creates the day and night cycle.



Key Scientists: Pythagoras, Aristotle And Plato.

