## **Year 5 Earth and Space Knowledge Organiser**

## **Golden Thread: Communication**

## **Objectives and Sticky Knowledge**

### **Previous Knowledge Recap:**

- Dark is the absence of light
- Light is needed in order to see and is reflected from a surface
- A shadow is a dark area or shaped that is produced by a body coming between rays of light and a surface
- Know about the danger of direct sunlight and describe how to keep protected



Describe the Sun, Earth and Moon (using the term spherical)	To know about and explain the movement of the Moon relative to the Earth.	To know how night and day occur.	Know about and explain the movement of the Earth and other planets relative to the Sun
- A sphere is a round, 3D shape in the shape of a ball The Sun has a temperature of 5778K. The Moon has a temperature of -183 degrees C. Earth has a temperature of 13.9 degrees C There is life on Earth due to the presence of water, vegetation and sunlight.	<ul> <li>The moon orbits the Earth in an oval-shaped path.</li> <li>The moon appears to be different shapes at different times in the month because the sun lights up different parts of the moon as the moon moves around the Earth.</li> <li>A waxing moon has a visible area that is increasing.</li> <li>A waning moon has a visible area that is decreasing.</li> <li>A crescent moon is less than a full quarter.</li> <li>A gibbous moon is greater than a half moon.</li> </ul>	- Earth rotates on its axis It completes a full rotation over 24 hours Day occurs when the side of the Earth is facing the Sun; night occurs when the side of the Earth is facing away from the Sun.	<ul> <li>Name and order the planets in the Solar System: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune.</li> <li>Know that a rotation is a full turn on an axis.</li> <li>Know that an orbit is the path of an object around a particular point in space.</li> </ul>



# **Year 5 Earth and Space Knowledge Organiser**

## **Key Vocabulary**

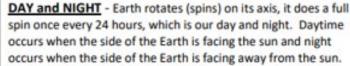
Key Vocabulary	
orbit	To move in a regular, repeating curved path around another object.
rotate	To spin. E.g. Earth rotates on its own axis.
axis	An imaginary line that a body rotates around. E.g. Earth's axis (imaginary line) runs from the North Pole to the South Pole.
geocentric model	A belief people used to have that other planets and the Sun orbited around Earth.
heliocentric model	The structure of the Solar System where the planets orbit around the Sun.
astronomer	Someone who studies or is an expert in astronomy (space science).

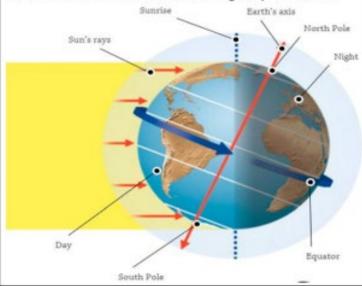


Key Vocabulary	
Sun	A huge star that Earth and the other planets in our solar system orbit around.
star	A giant ball of gas held together by its own gravity.
moon	A natural satellite which orbits Earth or other planets.
planet	A large object, round or nearly round, that orbits a star.
sphere	A round 3D shape in the shape of a ball.
spherical bodies	Astronomical objects shapes like spheres.
satellite	Any object or body in space that orbits something else, for example: the Moon is a satellite of Earth.

### **Sky Objectives:**

- Use a range of enquiries to answer a broad range of scientific-based questions.
- Carefully observe and accurately measure variables during an investigation.
- Use a combination of observations and data to draw conclusions that either support or refute the grounds of an investigation.





#### THE EARTH and THE MOON

The moon orbits Earth in an oval-shaped path whilst it spins on its axis. At different times in the month the moon appears to be different shapes, this is because the sun lights up different parts of the moon as the moon moves around the Earth.

