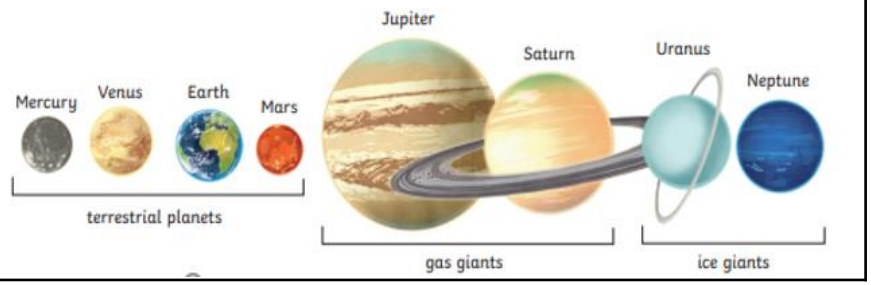
Year 5 – Autumn 2 2026-2027 - Knowledge Organiser
Enquiry Question: Why is the Earth's position in the solar system important?

Love, Hope, Community

Subject Specific Vocabulary

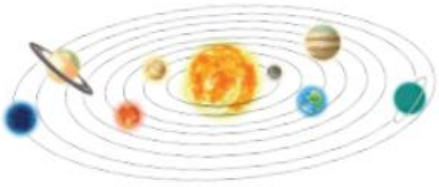
Solar System	The Sun and everything that orbits it, including planets and moons
Orbit	The curved path that objects (like planets) follow around a star or planet
Axis	An imaginary line through the Earth that it spins around
Rotation	The spinning of the Earth on its axis (causes day and night)
Moon Phases	The changing appearance of the Moon due to its position around Earth
Geocentric	Old model where Earth was thought to be the centre of the universe
Heliocentric	Model where the Sun is at the centre of the solar system
Satellite	An object that orbits a planet (the Moon is Earth's natural satellite)
Atmosphere	The layer of gases around Earth that protects and supports life
Goldilocks Zone	The area around a star where conditions are just right for life to exist

The 8 Planets of the Solar System



The Solar System

The **Solar System** is home to our own planet **Earth**, as well as seven other planets and their moons. At the centre of the **Solar System** is a **star:** the **Sun.** It sends heat and light out to the far reaches of space And Its gravitational pull keeps the other **celestial bodies** in the Solar System in **orbit** around it.



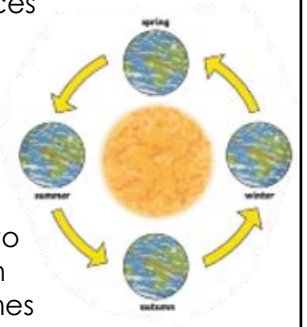
Day and Night

Every 24 hours, **Earth** rotates on its **axis**, which is an imaginary line that passes through its centre. This rotation causes the **Sun** to appear to move across the sky and is what causes the cycle of day and night, as one side faces the Sun and the other side faces away. The side facing the Sun will be experiencing daytime, as it is lit and heated by sunlight. The side facing away will be experiencing night-time as it is in shadow.



Seasons

Each year, many places on Earth experience four seasons – each lasting for three months. These are spring, summer, autumn and winter. The seasons are due to Earth's **tilt** of 24° which means at different times throughout the year, parts of Earth are either tilted towards or away from the Sun, which changes temperatures and weather conditions.



Cool Facts

It takes Earth 365.25 days to orbit the Sun. Combined with Earth's tilt, this causes the seasons.
The Moon orbits Earth every 28 days. We see different phases of the Moon depending on its position.
Ancient astronomers believed Earth was the centre (geocentric model). Galileo and Copernicus proved the heliocentric model instead.

A planet is a large **celestial body** that **orbits** a **star.** Planets are roughly **spherical** in shape. There are **eight** planets **orbiting** round the Sun in the Solar System, some made of rock and metal (the terrestrial planets) and some made of gas and ice (the gas and ice giants)

Our Drivers	Spiritual Diversity	Communities & Environment	Life Skills	Personal, Social & Emotional Well Being

Love, Hope, Community

Orchid Class – Autumn 2

Why is the Earth's position in the solar system important?



Launch Text: Cosmic by Frank Cottrell Boyce (Sci-Fi)

ENGLISH

Writing

- To know the main features of a sci-fi narrative and write our own version.
- To know how to integrate speech and action to move a narrative along.
- To know how to write descriptions of different planets.
- To know how to write weather reports coming from different planets.

Reading

- To know how to read and discuss a range of poems.
- To know how to draw inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence.

Spelling

- To know how to spell words with silent letters, modal verbs and adverbs.

MATHS

Multiplication & Division

- To know how to multiply 2- and 3-digit numbers by a 1-digit number using partitioning.
- To know how expanded multiplication develops into short multiplication, including regrouping.
- To know how to divide 2- and 3-digit numbers by a 1-digit number using partitioning and short division.
- To know how to record regrouping and remainders and use estimation to check whether answers are reasonable.
- To know how to choose efficient multiplication and division methods

PERSONAL, SOCIAL AND HEALTH EDUCATION

Jigsaw Piece 2: Celebrating Differences

- To know what culture means
- To know that differences in culture can sometimes be a source of conflict
- To know what racism is and why it is unacceptable
- To know that rumour spreading is a form of bullying on and offline
- To know that bullying can be direct and indirect
- To know how their life is different from the lives of children in the developing world

RELIGIOUS EDUCATION

Christianity: Is the Christmas Story True?

- To know that many Christians believe the Christmas Story tells the birth of Jesus, who they see as the Son of God.
- To know that the Christmas Story us found in the Bible and that different accounts exist in the Gospels of Matthew and Luke.
- To know that Christians may understand parts of the Christmas Story symbolically, not always as historical fact.

PHYSICAL EDUCATION

Handball

- To know how to work as a team to gain and keep possession of the ball.
- To know how to pass and dribble the ball using a variety of techniques.
- To know how to choose and apply simple attacking and defending tactics in game situations.

Dance

- To know how to perform a dance in time with an accompaniment.
- To know how to create and perform dance phrases with clarity, fluency, and control.
- To know how to refine and improve movements to ensure accuracy and consistency in performance.

COMPUTING

Databases:

- To understand what a database is.
- To design and create a database.
- To build queries to find information.

Word Processing – Microsoft Word

- To learn how to adjust the layout of a Word document.
- To learn how to insert and format images in Word.
- To use tables in Word to organise information.
- To combine Word skills to create and review a factsheet.

SCIENCE

Earth & Space

- To know how the Earth and other planets move around the Sun in our solar System.
- To know how the Moon moves in relation to the Earth, and how this causes the Moon's phases.
- To know that the Earth, Sun and Moon are spherical and not flat.
- To know how the Earth's rotation explains day and night, and why the Sun appears to move across the sky.

FRENCH

All About Ourselves

- To know how to talk about myself in French, including je m'appelle and j'ai … ans.
- To know how to use je vais and je voudrais être to share plans and ambitions.
- To know how to spell and pronounce French words and letters accurately.

MUSIC

Guitar - Delivered by OCM's First Access programme.

DESIGN TECHNOLOGY

- To know how simple mechanisms such as levers, pulleys and gears work and how they make work easier.
- To know how to investigate and compare mechanical systems in real-world space applications (e.g. rovers, telescopes, launch systems).
- To know how to design and make a moving product that uses levers, pulleys or gears to solve a problem.