

Project glossary

atmosphere

A layer of gases that surrounds a planet, such as Earth.

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axis

An imaginary line that runs through the centre of an object, such as a planet, about which it rotates.

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block

To stop the passage of something.

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constellation

A group of stars in the sky that appear to form a pattern when viewed from Earth and is given a name, such as Orion or Leo.

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daytime

The time of day between sunrise and sunset when that part of the planet is facing the Sun.

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dwarf planet

A natural object in space that orbits a star and is large enough for its gravity to pull its mass into a spherical shape but is smaller than a planet, so has remaining space debris orbiting it.

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Earth

The planet in our Solar System upon which we live that has the optimum conditions to support life, such as the right amount of water, oxygen and warmth.

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first quarter Moon

The third phase of the Moon when half of its lit side is visible from Earth because the Moon has completed one-quarter of its monthly orbit.

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full Moon

The fifth phase of the Moon when its entire lit half is visible from Earth because the Moon has completed half of its monthly orbit.

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galaxy

A huge collection of dust, gas, stars and their solar systems.

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gas giant

A large planet mostly made up of gases.



geocentric model

The disproven theory that the Earth is at the centre of the Solar System and all the other planets and the Sun orbit around it.

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Goldilocks planet

A planet, such as Earth, that has exactly the right conditions for living things to survive.

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gravitational force

A non-contact pulling force between objects that have mass.

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heliocentric model

The proven theory that the Sun is at the centre of the Solar System and the eight planets orbit around it.

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horizon

A visual boundary where the sky appears to meet the ground or sea.

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Jupiter

The largest of the eight planets in our Solar System that has four large moons and numerous small ones. It is the fifth planet from the Sun and is a gas giant.

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last quarter Moon

The seventh phase of the Moon when half of the lit side is visible from Earth because the Moon has completed three-quarters of its monthly orbit.

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lunar

Relating to the Moon.

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lunar eclipse

When the Moon passes into the Earth’s shadow and appears darker.

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Mars

The second smallest of the eight planets in our Solar System. It is the fourth planet from the Sun and is a terrestrial planet.

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mass

The amount of matter that an object contains.

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matter

Any physical substance that takes up space and can be weighed.



Mercury

The smallest of the eight planets in our Solar System. It is the closest planet to the Sun and is a terrestrial planet.

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Milky Way Galaxy

The galaxy we live in that contains the Solar System and billions of stars.

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moon

Any natural satellite that orbits a planet.

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the Moon

The natural satellite that orbits the Earth.

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Neptune

The fourth largest of the eight planets in our Solar System. It is the furthest planet from the Sun and is a gas giant.

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new Moon

The first phase of the Moon when we cannot see the side that is lit up by the Sun, so the Moon cannot be seen from Earth.

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night time

The time of day between sunset and sunrise when a part of the planet is facing away from the Sun.

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Northern Hemisphere

The half of the planet Earth that is north of the equator.

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orbit

The stable, circular path of an object revolving around a central mass with gravitational force, such as the planets revolving around the Sun, or the Moon revolving around the Earth.

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partial lunar eclipse

The view of a lunar eclipse from Earth when a person is standing in the penumbra part of the shadow, so only some of the light is blocked.

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partial solar eclipse

The view of a solar eclipse from Earth when a person is standing in the penumbra part of the shadow, so only some of the light is blocked.

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penumbra

A part of a shadow in which only some of the light is blocked.



phases of the Moon

The descriptions of the appearance of the Moon at specific times during its monthly orbit, where different proportions of the lit and the unlit sides of the Moon can be seen from Earth.

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planet

A natural object in space that orbits a star and is large enough for its gravity to pull its mass towards its centre, forming a spherical shape.

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Pluto

One of the dwarf planets in the Solar System.

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rotate

To turn around an axis.

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satellite

A natural or artificial object orbiting a larger natural object in space, such as the Moon or a spacecraft orbiting the Earth.

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Saturn

The second largest of the eight planets in our Solar System. It is the sixth planet from the Sun and is a gas giant that is surrounded by rings made up of billions of pieces of dust, ice and rocks.

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season

A division of the year, such as winter, spring, summer or autumn, which has particular weather patterns and day lengths and is caused by the tilt of a planet's axis as it rotates and orbits the Sun.

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shadow

An area of darkness created when an object blocks light.

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solar

Related to the Sun.

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solar eclipse

When the Moon passes between the Earth and the Sun and blocks some sunlight from reaching the Earth.

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Southern Hemisphere

The half of the planet Earth that is south of the equator.

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space

The area outside Earth's atmosphere.



spacecraft

A vehicle used for travel in space.

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star

A ball of gases held together by gravity that produces its own light and heat.

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Sun

The star in the Solar System around which the planets and other objects orbit. It is the only source of heat and light in the Solar System.

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sundial

An outdoor device that uses the Sun to tell the time.

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sunrise

The time of day when the Sun appears above the horizon in the east.

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sunset

The time of day when the Sun disappears below the horizon in the west.

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terrestrial

Describes a planet with a compact, hard surface that is made up of rocks or metals.

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the Solar System

The group of planets and smaller objects that orbit a central star called the Sun.

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total lunar eclipse

When the Earth passes between the Sun and the Moon and all three are perfectly lined up, casting a shadow on the Moon so that it appears totally dark.

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total solar eclipse

When the Moon passes between the Sun and the Earth and all three are perfectly lined up, blocking our view of the Sun and casting a shadow on part of the Earth.

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umbra

The dark, inner part of a shadow in which all light is blocked.

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universe

Everything that exists, including countless galaxies in space, all matter and all energy.

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Uranus

The third largest of the eight planets in our Solar System. It is the seventh planet from the Sun and is a gas giant.



Venus

The third smallest of the eight planets in our Solar System. It is the second planet from the Sun and is a terrestrial planet.

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waning crescent Moon

The eighth phase of the Moon when a small amount of the lit side is visible from Earth because the Moon has nearly completed its monthly orbit.

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waning gibbous Moon

The sixth phase of the Moon when a larger amount of the lit side is visible from Earth during the part of its orbit when its visibly lit side of the Moon is gradually getting smaller.

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wane

To decrease.

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waxing crescent Moon

The second phase of the Moon when a small amount of the lit side is visible from Earth during the the start of the Moon's orbit when the visible surface of the Moon is gradually getting larger.

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waxing gibbous Moon

The fourth phase of the Moon, when a larger amount of the lit side is visible from Earth during the part of the month when the visibly lit side of the Moon is gradually getting larger.

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wax

To increase.

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year

The amount of time it takes a planet to orbit the Sun. For example, an Earth year is 365.25 days, and a year on Mercury is 88 days.

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Scientific terms glossary

data

Collected information or facts, including numbers, words, measurements or observations..

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describe

To say aloud or write how something is done or what something is like.

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diagram

A drawing with labels that shows the parts of something.



equipment

An object or objects needed for a particular purpose, such as a torch or globe.

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findings

The information or facts that a person discovers from carrying out an observation, investigation or research.

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investigation

An activity that involves a person studying a subject or problem carefully to learn facts or answer a question. An investigation includes planning, doing, recording and reviewing stages.

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method

A set of instructions or steps to follow in a specific order to complete a particular task.

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model

A smaller copy of a real object used to show how something works or what it looks like, or a simple description of a system used to explain how something works.

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observe

To watch or look at something carefully.

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question

Something we ask using the words how, what, where, when, who and why.

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record

To write down data, such as numbers, words, measurements or observations in different ways, such as lists, tables, charts or labelled diagrams.

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research

To study a subject to discover new facts or information.

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table

A way of recording data in rows and columns.

