

Knowledge Organiser: Earth and Space

Year 5: Spring Term 2



Diagrams/maps etc



The Solar System



Phases of the moon

Sticky Knowledge

Know the universe comprises all matter and space in existence

Know that a celestial body is a large object in the universe

Know that a star is an exceptionally hot ball of gas, originally made from hydrogen and helium

Know that the Sun is a star

Know that a planet is defined as a spherical celestial body that orbits a star and that has cleared the neighbourhood of its orbit of other objects, some of which crash into the planet and others that become moons of that planet

Know it was once thought that everything orbited the Earth, but scientists like Galileo and Copernicus used telescopes and measurement to show the Earth orbits the Sun

Know that there are eight major planets in our solar system: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune

Know that the moon orbits the Earth roughly every 28 days

Know that as the moon orbits the Sun, different parts of it are lit up by the Sun, which is why we see a different shape lit up on the moon as the lunar cycle progresses

Know that the universe is utterly vast and our solar system makes up a tiny fraction of it

Know that a satellite orbits a planet and that moons are natural satellites

Know that humans have sent man-made satellites into orbit that assist with telecommunication

Continued overleaf



Extended Specialist Vocabulary

Word	Definition
New Vocabulary	
planet	a celestial body distinguished from the fixed stars by having an apparent motion of its own
satellite	an artificial body placed in orbit round the earth or moon or another planet in order to collect information or for communication
solar system	the collection of eight planets and their moons in orbit round the sun, together with smaller bodies in the form of asteroids, meteoroids, and comets.
eclipse	obscure the light from or to another celestial body
star	a fixed luminous point in the night sky
universe	all existing matter and space considered as a whole; the cosmos. The universe is believed to be at least 10 billion light years in diameter and contains a vast number of galaxies; it has been expanding since its creation in the Big Bang about 13 billion years ago
constellation	a group of stars forming a recognizable pattern
axis	an imaginary line about which a body rotates
celestial body	Something positioned in the sky or space
moon	the natural satellite of the earth
rotating	moving in a circle round an axis or centre
lunar	resembling the moon
solar	relating to the Sun
telescope	an optical instrument designed to make distant objects appear nearer, containing an arrangement of lenses, or of curved mirrors and lenses, by which rays of light are collected and focused and the resulting image magnified.