



<p>Vocabulary</p> <p>Earth, Orbit, Gravity, Rotate, Sun, Axis, Mars, Seasons, Mercury, Hemisphere, Venus, Lunar, Saturn, Spherical, Jupiter, Celestial, Uranus, Tilt, Neptune, Pluto, International Space Station, Mars Rover</p>	<p>Skills</p> <p><u>Enquiry and working scientifically skills (UKS2)</u></p> <ul style="list-style-type: none"> plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations identify scientific evidence that has been used to support or refute ideas or arguments. 	<p>What we already know</p> <p>Earth and Space is a new topic to Year 5 in science however as part of their general knowledge, some children may know some basic concepts about ‘Earth and Space’ including...</p> <ul style="list-style-type: none"> Earth is a planet ‘in space’ Gravity is a force that stops things from floating in the air Space is vast and much is yet to be explored or discovered Earth is the only planet able to sustain human life <p><u>KS1 – Knowledge</u></p> <ul style="list-style-type: none"> Y2/Sp1 – What can ‘pushes and pulls’ do? Y2/Sp2 – Mars is a planet – gravity <p><u>KS2 – Knowledge and Skills</u></p> <ul style="list-style-type: none"> Y3/Sp2 – Forces and Magnets - A force is a push or a pull Y3/Sp2 – Taking accurate measurements, Gather and record data accurately in a variety of ways
<p>Application/ Outcomes</p> <ul style="list-style-type: none"> Debate using evidence for a spherical earth vs. flat earth Outdoor Learning – shows Earth, moon and sun’s movements. create ‘moon cycle’ diagrams to show the different phases of the moon Use Earth’s rotation to explain day and night - link to seasons Discuss ideas about the solar system changing Space exploration over time 		<p>Concepts</p> <ul style="list-style-type: none"> the Sun is a star at the centre of our solar system and it has eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune a moon is a celestial body that orbits a planet the Earth orbits the sun and the moon orbits the Earth Orbit is caused by gravity which pulls objects towards the centre of gravity it takes 365 ¼ days for the Earth to orbit the sun, and 28 days for the moon to orbit the Earth the moon appears in different ‘phases’ of its cycle the sun can appear to be ‘eclipsed’ by the moon
<p>Cross Curricular Links</p> <p>Computing – Robotics – their use in understanding space and enabling further space exploration Reading/diversity – first woman in space – black women at NASA Link to visit to Space Centre</p>	<p>SEND Adaptations</p> <p>Word banks, image mats, differentiated worksheets, adult support.</p>	