

Year 5 & 6

Theme: Out of This World (Science Focus)

Length of time: 10 weeks

Big question: Is there anybody out there?

Hook from our 5 star pledge/enrichment programme: Planetarium at 'We The Curious', Bristol?

<u>Key learning Outcome for theme</u>		<u>Maths links</u>	<u>Key Vocab essential to comprehension and learning</u>
<u>National curriculum objectives</u> <u>Science:</u> Spr1) Earth and Space Pupils should be taught to: <ul style="list-style-type: none">describe the movement of the Earth, and other planets, relative to the Sun in the solar systemdescribe the movement of the Moon relative to the Earth describe the Sun, Earth and Moon as approximately spherical bodiesuse the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. Spr2) Forces Pupils should be taught to: <ul style="list-style-type: none">explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling objectidentify the effects of air resistance, water resistance and friction, that act between moving surfacesrecognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	<u>National curriculum key skills</u> <u>Science:</u> Can I find out about the way that ideas about the solar system have changed? Can I compare the time of day at different places on the Earth? (link to computing and data handling and Geography) Can I create models of the solar system? Can I report and present findings from enquires, in oral and written forms such as displays and other? Can I explore falling objects and raise questions about the effects of air resistance? Can I make a variety of parachutes to determine the most effective design? Can I record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs?	 Measure, scaling and ratio Time –12/ 24hr Stop clock timers, data handling – discrete data graphs, result tables	 Earth, planets, Sun, solar system, Moon, celestial body, sphere/ spherical rotate/ rotation, spin, night and day, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, 'dwarf' planet, orbit, revolve, geocentric model / heliocentric model, shadow, clocks, sundials, astronomical clocks, phases, wax/wane Fall, push, pull, gravity, gravitational pull, force, air resistance, water resistance, friction, moving surfaces, mechanisms, levers,

<p><u>Geography:</u> (Locational Knowledge)</p> <p>Use google maps to look at Earth from space Identify main continents Investigate different continents by area/biome</p> <p>Name at least three countries and capital cities on each continent</p> <p><i>(eg, from an alien's point of view, describe Earth and focus on 'wonders'; use longitude and latitude refs to locate)</i></p> <p><u>Art/DT:</u></p> <p>Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.</p> <p><i>Use marbling techniques to create various space-themed pieces</i></p> <p><i>Block printing to illustrate the phases of the moon</i></p> <p>Rockets (eg https://www.youtube.com/watch?v=jl-HeXhsUlg&vI=en)</p> <p><u>Computing:</u> (link to E-safety week)</p> <p>Multimedia presentation (using PowerPoint, Adobe Spark, ThingLink, Padlet, Prezi, Keynote-Apple only, Canva and Microsoft Sway or similar) on continents and countries within</p> <p>Data Handling software to compare country within chosen continent with UK (eg, population, climate, size, GDP, etc)</p>	<p>Can I use tests results to make predictions to suggest further comparative and fair tests?</p> <p><u>Geography:</u></p> <p>On a world map, can I locate the main countries in Africa, Asia and Australasia/Oceania and identify their main environmental regions, key physical and human characteristics, and major cities?</p> <p>Can I identify the position and significance of Equator and the Tropics of Cancer and Capricorn?</p> <p><u>Art/DT:</u></p> <p>Can I explore an increasing range of marks and textures with a variety of media? Use findings in their work both observational and expressive.</p> <p>Can I continue to develop vocabulary to name colours using primary and secondary colour names together with other words. eg. 'dark reddish purple?</p> <p><u>Computing:</u></p> <p>Can I use text, photo, sound and video editing tools to refine my work?</p> <p>Can I use the skills I have already developed to create content using unfamiliar technology?</p> <p>Can I select, use and combine the appropriate technology tools to create effects that will have an impact on others?</p> <p>Can I select an appropriate online or offline tool to create and share ideas?</p> <p>Can I review and improve my work and support others to improve their work?</p>	<p>8 Compass directions, longitude and latitude references</p> <p>Drawing accurate circles - 2 point compass</p>	<p>pulleys, gears, magnetic/magnetic force, magnets, attract, poles</p>
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<p><u>RE:</u> What does it mean to be a Muslim in Britain today?</p>	<p><u>RE:</u> Can I explain the impact of and connections between practices? Can I give coherent accounts of beliefs and ideas?</p>		
<p>Elicitation Task: Consider life forms on other planets – is it possible? Is the Earth the only planet able to sustain life? Look at Earth from space – what makes it special?</p>			
<p>Other subjects not linked to this topic – PE, see separate planning, MFL (lightbulb languages scheme of work), link to RE, PHSE (debates)</p> <p>Other events – Easter</p>			