

Year 5 - Space Explorers

	Science	Geography	History	DT	Art
Learning Objectives	<p>Working scientifically</p> <ul style="list-style-type: none"> To work scientifically <p>Physics</p> <ul style="list-style-type: none"> To understand movement, forces and magnets To understand the Earth's movement in space 	<ul style="list-style-type: none"> To investigate places To investigate patterns To communicate geographically 	<ul style="list-style-type: none"> To investigate and interpret the past To build an overview of world history To understand chronology To communicate historically 	<ul style="list-style-type: none"> To master practical skills To design, make, evaluate and improve To take inspiration from design throughout history <p>DT to be taught using the following cycle:</p> <p>Evaluate Explore skills Design Make Evaluate</p>	<ul style="list-style-type: none"> To develop ideas To master techniques To take inspiration from the greats <p>Art to be taught using the following cycle:</p> <p>Evaluate Explore skills Plan Create Evaluate</p>
Milestones	<p>Working scientifically</p> <ul style="list-style-type: none"> Plan enquiries, including recognising and controlling variables where necessary. Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work. Take measurements, using a range of scientific equipment, with increasing accuracy and precision. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models. Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions. Present findings in written form, displays and other presentations. Use test results to make predictions to set up further comparative and fair tests. Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments. <p>Physics</p> <p>Magnets</p> <ul style="list-style-type: none"> Describe magnets as having two poles. Predict whether two magnets will attract or repel each other, depending on which poles are facing. <p>Forces</p> <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 object. Identify the effect of drag forces, such as air resistance, water resistance and friction that act between moving surfaces. Describe, in terms of drag forces, why moving objects that are not driven tend to slow down. <p>To understand the Earth's movement in space</p> <ul style="list-style-type: none"> Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. Describe the movement of the Moon relative to the Earth. Describe the Sun, Earth and Moon as approximately spherical bodies. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. 	<p>To investigate places</p> <ul style="list-style-type: none"> Analyse and give views on the effectiveness of different geographical representations of a location (such as aerial images compared with maps and topological maps - as in London's Tube map). <p>To investigate patterns</p> <ul style="list-style-type: none"> Identify and describe the geographical significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, and time zones (including day and night). <p>To communicate geographically</p> <ul style="list-style-type: none"> Use the eight points of a compass, four-figure grid references, symbols and a key (that uses standard Ordnance Survey symbols) to communicate knowledge of the United Kingdom and the world. 	<p>To investigate and interpret the past</p> <ul style="list-style-type: none"> Use sources of evidence to deduce information about the past. Show an awareness of the concept of propaganda and how historians must understand the social context of evidence studied. Understand that no single source of evidence gives the full answer to questions about the past. <p>To build an overview of world history</p> <ul style="list-style-type: none"> Compare some of the times studied with those of the other areas of interest around the world. <p>To understand chronology</p> <ul style="list-style-type: none"> Describe the main changes in a period of history (using terms such as: social, religious, political, technological and cultural). Identify periods of rapid change in history and contrast them with times of relatively little change. <p>To communicate historically</p> <ul style="list-style-type: none"> Use literacy, numeracy and computing skills to a exceptional standard in order to communicate information about the past. Use original ways to present information and ideas. 	<p>To master practical skills</p> <p>Mechanics</p> <ul style="list-style-type: none"> Convert rotary motion to linear using cams. Use innovative combinations of electronics (or computing) and mechanics in product designs. <p>To design, make, evaluate and improve</p> <ul style="list-style-type: none"> Design with the user in mind, motivated by the service a product will offer (rather than simply for profit). Make products through stages of prototypes, making continual refinements. Use prototypes, cross-sectional diagrams and computer aided designs to represent designs. Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices. <p>To take inspiration from design throughout history</p> <ul style="list-style-type: none"> Create innovative designs that improve upon existing products. Evaluate the design of products so as to suggest improvements to the user experience. 	<p>To develop ideas</p> <ul style="list-style-type: none"> Develop and imaginatively extend ideas from starting points throughout the curriculum. Collect information, sketches and resources and present ideas imaginatively in a sketch book. Comment on artworks with a fluent grasp of visual language. <p>To Master Techniques</p> <p>Drawing</p> <ul style="list-style-type: none"> Use a variety of techniques to add interesting effects (e.g. reflections, shadows, direction of sunlight). Use a choice of techniques to depict movement, perspective, shadows and reflection. Choose a style of drawing suitable for the work (e.g. realistic or impressionistic). Use lines to represent movement. <p>To take inspiration from the greats</p> <p>Give details (including own sketches) about the style of some notable artists, artisans and designers.</p> <p>Show how the work of those studied was influential in both society and to other artists.</p> <ul style="list-style-type: none"> Create original pieces that show a range of influences and styles.

RE	What do religions and world views believe about God? How is Christmas celebrated around the world?
PE units	Swimming, Yoga indoor, Invasion games (hockey/football) Dance-in the playground unit
PSCHE	Healthy me
Spanish	Classroom language and items Christmas Numbers 1-20 revision Gender of nouns focus (a and the)
Educational experience	Planetarium dome in school, Science Museum trip