

**Archbishop Hutton's V.C. Primary School**  
**Medium Term Curriculum Planning Overview**  
**Class 4**

Theme: Science around us...		Term: Autumn Term 2 2023	Year Groups:
Space and Light		Year: Two	Five and Six
Starting Stimulus		Visitors and Visits/ Experiences and Events	Final Outcomes
KWL      Personal Knowledge		Lancaster University STEM Session LU Planetarium	Science Week – School presentation Class text/ Display
Subjects	Key and Procedural knowledge		
MAIN DRIVER  Science	Science around us...	Key Knowledge	
	Light and Space	<p>During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"><li>planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li><li>taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li><li>recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li><li>using test results to make predictions to set up further comparative and fair tests</li><li>reporting and presenting 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</li><li>identifying scientific evidence that has been used to support or refute ideas or arguments</li></ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"><li>Light appears to travel in straight lines and we see objects when light from them goes into our eyes.</li><li>The light may come directly from light sources but for other objects some light must be reflected from the object into our eyes for the object to be seen.</li><li>Objects that block light (are not fully transparent) will cause shadows. Because light travels in straight lines the shape of the shadow will be the same as the outline shape of the object and the size of the shadow is larger when the light source and object move closer to each other as more of the light is blocked.</li><li>The sun is a star. It is at the centre of our solar system.</li><li>There are 8 planets (can name them). These travel around the sun in fixed orbits.</li><li>Earth takes 365 ¼ days to complete its orbit around the sun.</li><li>The earth rotates (spins) on its axis.</li><li>As earth rotates, half faces the sun (here it is day) and half is facing away from the sun (night).</li><li>As the earth rotates the sun appears to move across the sky.</li><li>The moon orbits the earth. It takes about 28 days to complete its orbit.</li><li>The sun, earth and moon are approximately spherical.</li></ul> <p><b>Vocabulary:</b> straight lines, light rays, light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous, Earth, Sun, Moon, Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune, spherical, solar system, rotates, star, orbits, planets, axis.</p>	
DT	DT – Kapow, electrical systems, doodlers (Y5)		
	Procedural Knowledge -		

	<ul style="list-style-type: none"><li>To know that, in a series circuit, electricity only flows in one direction.</li><li>To know when there is a break in a series circuit, all components turn off.</li><li>To know that an electric motor converts electrical energy into rotational movement, causing the motor's axle to spin.</li><li>To know a motorised product is one which uses a motor to function.</li></ul>	
Computing	<ul style="list-style-type: none"><li><b>Year 5 – App Design – Computer networks and the internet</b></li></ul>	
	<b>Procedural knowledge</b> <b>Y5</b> <ul style="list-style-type: none"><li>Can they use a range of presentation applications?</li><li>Do they consider audience when editing?</li><li>Can they use ICT to record sounds and capture both still and video images?</li><li>Can they capture sounds, images and video?</li><li>Can they use a search engine using keyword searches?</li><li>Can they compare the results of different searches?</li><li>Can they decide which sections are appropriate to copy and paste from at least two web pages?</li><li>Can they save stored information following simple lines of enquiry?</li><li>Can they download a document and save it to the computer?</li></ul>	<b>Y6</b> <ul style="list-style-type: none"><li>Can they explore the menu options and experiment with images (colour effects, options, snap to grid, grid settings etc.)?</li><li>Can they add special effects to alter the appearance of a graphic?</li><li>Can they 'save as' gif or i peg. wherever possible to make the file size smaller (for emailing or downloading)?</li><li>Can they make an information poster using their graphics skills to good effect?</li><li>Can they contribute to discussions online?</li><li>Can they use a search engine using keyword searches?</li><li>Can they use complex searches using such as '+' 'OR' "Find the phrase in inverted commas"?</li></ul>
	<b>E- safety –</b> <ul style="list-style-type: none"><li>Can they discuss the positive and negative impact of the use of ICT in their own lives and those of their peers and family?</li><li>Do they understand the potential risk of providing personal information online?</li><li>Do they recognise why people may publish content that is not accurate and understand the need to be critical evaluators of content?</li><li>Do they understand that some websites and/or pop-ups have commercial interests that may affect the way the information is presented?</li><li>Do they recognise the potential risks of using internet communication tools and understand how to minimise those risks (including scams and phishing)?</li><li>Do they understand that some material on the internet is copyrighted and may not be copied or downloaded?</li><li>Do they understand that some messages may be malicious and know how to deal with this?</li></ul>	
Music	<b>Theme and Variations Pop Art/ Young Voices</b>	
	<b>Procedural Knowledge</b> <ul style="list-style-type: none"><li>To know that a 'theme' is a main melody in a piece of music.</li><li>To know that 'variations' in music are when a main melody is changed in some way throughout the piece.</li><li>To know that 'The Young Person's Guide to the Orchestra' was written in 1945 by Benjamin Britten.</li><li>To understand that representing beats of silence or 'rests' in written music is important as it helps us play rhythms correctly.</li></ul>	
P.E.	<b>Invasion Games - Hockey</b> <ul style="list-style-type: none"><li>play competitive games, modified where appropriate, (for example badminton, basketball, cricket, football, hockey, netball, rounders and tennis) and apply basic principles suitable for attacking and defending</li></ul> <b>Swimming and water safety</b> All schools must provide swimming instruction either in Key Stage 1 or Key Stage 2.	

	Pupils should be taught to: <ul style="list-style-type: none"> <li>• swim competently, confidently, and proficiently over a distance of at least 25 meters</li> <li>• use a range of strokes effectively, (for example front crawl, backstroke, and breaststroke)</li> <li>• perform safe self-rescue in different water-based situations.</li> </ul>	
	<b><u>Procedural knowledge</u></b>  <b><u>Y5</u></b> <ul style="list-style-type: none"> <li>• Can they gain possession by working as a team?</li> <li>• Can they pass in different ways?</li> <li>• Can they use forehand and backhand with a racquet?</li> <li>• Can they field?</li> <li>• Can they choose the best tactics for attacking and defending?</li> <li>• Can they use a number of techniques to pass, dribble and shoot?</li> </ul>	<b><u>Y6</u></b> <ul style="list-style-type: none"> <li>• Can they explain complicated rules?</li> <li>• Can they make a team plan and communicate it to others?</li> <li>• Can they lead others in a game situation?</li> </ul>
<b>Spanish</b>	<b>Pets</b> <ul style="list-style-type: none"> <li>• How to find the gender of a noun by looking it up in the dictionary where Spanish nouns are followed by a gender indicator.</li> <li>• That the ending of an adjective often changes according to the gender of the noun it describes.</li> </ul>	
<b>P.S.H.E.</b>	<b>1decision</b> <ul style="list-style-type: none"> <li>• Keeping Safe and Staying Safe</li> <li>• Being Responsible</li> </ul>	
<b>R.E.</b>	<b>Year 6 God</b> <b>Year 6 Key Question (to be used all year): In what ways is life like a journey?</b> <b>Focus Question (for this investigation): What is worth celebrating?</b> <ul style="list-style-type: none"> <li>• To examine the belief in a creator God who is active in the world redeeming it.</li> <li>• To focus on 'becoming' as revealed in lived examples and in preparations and qualities portrayed by participants in accounts of the Christmas story.</li> <li>• Use developing religious vocabulary to describe and show understanding of religious traditions, including sources, practices, beliefs, ideas, feelings and experiences. (B&amp;V LRT)</li> <li>• Explain what inspires and influences them, expressing their own views whilst respecting other people's. (SPM).</li> <li>• To analyse religious information and begin to develop their own opinions B&amp;V, SPM.</li> <li>• Ask important questions about religion and beliefs, (eg, identity, belonging, meaning, purpose, truth, values and commitments).</li> <li>• Compare different viewpoints within a faith group. (SHE, B&amp;V, SPM)</li> </ul>	
<b>Cross-curricular writing opportunities</b>	<ul style="list-style-type: none"> <li>• National Non fiction November</li> <li>• Non chronological reports/ Hybrid information texts</li> <li>• Debate discussion – Arguments – Flat Earth</li> <li>• Newspaper reports/ Journalistic writing</li> <li>• Poetry linked to topic</li> </ul>	

<b>Cross-curricular maths opportunities</b>	<p>Classifying and interpreting data – Linked with Space and Light</p> <p>Graphs</p>
<b>English Units</b>	<p><b>Non-fiction: Information hybrid texts-</b> Doctor Maggie's Guide to the Solar System</p> <p><b>National Non Fiction November</b></p> <p><b>Narrative text: Classic fiction</b> A Christmas Carol</p>