



Year 5 Medium Term Plan Spring 1

	Science	Humanities	RE	Computing
Theme	<p>Theme: Forces Key skills:</p> <ul style="list-style-type: none"> Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary; recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs; reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations <p>Key knowledge:</p> <ul style="list-style-type: none"> Unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and falling objects. The effects of air resistance, water 	<p>Theme: Vikings Key skills</p> <ul style="list-style-type: none"> Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They should note connections, contrasts and trends over time Develop the appropriate use of historical terms. They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. They should understand how our knowledge of the past is constructed from a range of sources. <p>Key knowledge The Viking and Anglo-Saxon struggle for the Kingdom of England</p>	<p>TOPIC - Sikhism Beliefs and moral values</p> <p>Key question for this enquiry: Are Sikh stories important today?</p> <p>Key skills - I can explain how some stories can teach people about what is important and how to behave.</p> <p>Key knowledge</p> <ul style="list-style-type: none"> Able to recall the meaning in stories (Guru Nanak and jasmine flower - happiness/ honesty, Bhai Lalo and Malik - equality / honesty, Vaisakhi - courage) 	<p>Unit 5.3 Spreadsheets</p> <p>Key Skills:</p> <ul style="list-style-type: none"> Pupils can create a formula using 2Calculate that converts metres into centimetres Pupils can program different variables to convert data from one format and present it in an alternative way <p>Key Knowledge:</p> <ul style="list-style-type: none"> Pupils know how to use, manipulate, and create spreadsheets Pupils know how to use formulae such as converting between measures and incorporating text variables to perform calculations.

	<p>resistance and friction, that act between moving surfaces.</p> <ul style="list-style-type: none"> Some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. <p>Trips: Science Museum Natural History Museum</p> <p>Resources: https://www.stem.org.uk/resource/s/community/collection/12696/year-5-forces</p> <p>https://www.hamilton-trust.org.uk/ht-search/?query=forces</p>	<p>to the time of Edward the Confessor;</p> <p>Enrichment: Viking workshop visit TBC</p> <p>Trips British Museum or Museum of London</p> <p>Visitors</p>		
<p>Week 1</p>	<p>LO: To identify forces acting on an object.</p> <p>Key skills</p> <ul style="list-style-type: none"> To be able to use relevant scientific language and illustrations to discuss, communicate and justify scientific ideas. <p>Key knowledge</p> <ul style="list-style-type: none"> Gravity is a pulling force exerted by the Earth. The gravitational force pulls in the direction towards the centre of the Earth. If the forces pushing and pulling an object are the same strength, they are balanced. Unbalanced forces change the way an object is moving. 	<p>LO To understand what image we have of the Vikings</p> <p>Key skills</p> <ul style="list-style-type: none"> Note connections, contrasts and trends over time Develop the appropriate use of historical terms. Regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. Construct informed responses that involve thoughtful selection and organisation of relevant historical information. Understand how our knowledge of the past is constructed from a range of sources. <p>Key knowledge Modern day perception of the Vikings Timeline of the Viking invasion of</p>	<p>LO: To investigate the importance of the Guru Granth Sahib in Sikhism</p> <p>Key Skills</p> <ul style="list-style-type: none"> Investigation Interpretation <p>Key knowledge</p> <ul style="list-style-type: none"> To know what the Guru Granth Sahib is the holy book in Sikhism To know what the holy book means for those who follow the religion To know the story of the Milk and Jasmin Flower 	<p>LO:To use conversion formula on spreadsheets</p> <p>Key Skills:</p> <ul style="list-style-type: none"> Pupils can create a formula in a spreadsheet to convert m to cm. Pupils can apply this to creating a spreadsheet that converts miles to km and vice versa. <p>Key Knowledge:</p> <ul style="list-style-type: none"> Know the purpose of a spreadsheet Know how to create a spreadsheet Know how To use formulae within a spreadsheet to convert measurements of length and distance.

		England		
Week 2	<p>LO: To explore the effect gravity has on unsupported objects.</p> <p>Key skills</p> <ul style="list-style-type: none"> To be able to use test results to make predictions to set up further comparative and fair tests. To be able to take measurements, using a range of scientific equipment, with increasing accuracy and precision. <p>Key knowledge</p> <ul style="list-style-type: none"> Unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. The weight of an object is caused by gravity pulling it down. Objects with more mass have a greater weight, as the force of gravity pulls them down with greater strength. 	<p>LO To investigate how the Vikings gained a bad reputation</p> <p>Key skills</p> <ul style="list-style-type: none"> Note connections, contrasts and trends over time Develop the appropriate use of historical terms. Regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. Construct informed responses that involve thoughtful selection and organisation of relevant historical information. Understand how our knowledge of the past is constructed from a range of sources. <p>Key knowledge Popular representation of Vikings Bias in historical writings</p>	<p>Lo: To investigate the story of Bhai Lao and its significance to Sikhism beliefs.</p> <p>Key skills</p> <ul style="list-style-type: none"> Investigation <p>Key Knowledge</p> <ul style="list-style-type: none"> To know the story of Bhai Lao To understand how the story relates to Sikhism To know that some stories have morals that can be learned from. 	<p>LO: To use the count tool</p> <p>Key Skills:</p> <ul style="list-style-type: none"> To use the count tool to answer hypotheses about common letters in use. <p>Key Knowledge:</p> <ul style="list-style-type: none"> Pupils know how to use a spreadsheet to work out which letters appear most often. Pupils know how to use the 'how many' tool.
Week 3	<p>LO:To investigate the effects of air resistance.</p> <p>Key skills</p> <ul style="list-style-type: none"> Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. To be able to report and present findings from enquiries, including conclusions, causal 	<p>LO To investigate how close the Vikings were to taking over the country</p> <p>Key skills</p> <ul style="list-style-type: none"> Note connections, contrasts and trends over time Develop the appropriate use of historical terms. Regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. Construct informed responses that 	<p>Lo: To investigate the story of Vaisakhi - Birth of the Khalsa</p> <p>Key skills :</p> <ul style="list-style-type: none"> Investigation <p>Key knowledge:</p> <ul style="list-style-type: none"> To understand the story of vaisakhi To know how the story is significant to both sikhs and non sikhs To understand the themes of courage 	<p>LO: To be able to use advanced formula in spreadsheet</p> <p>Key Skills:</p> <ul style="list-style-type: none"> Pupils can use a spreadsheet to work out the area and perimeter of rectangles. Pupils can use these calculations to solve a real-life problem. <p>Key Knowledge:</p> <ul style="list-style-type: none"> Pupils know how To use a spreadsheet to model a

	<p>relationships and explanations.</p> <p>Key knowledge</p> <ul style="list-style-type: none"> • Air pushes against any object moving through it. This is known as air resistance. • The effects a bigger surface area has on air resistance. <p>Science / Design & Technology KS2: Harnessing air resistance with parachutes - BBC</p>	<p>involve thoughtful selection and organisation of relevant historical information.</p> <ul style="list-style-type: none"> • Understand how our knowledge of the past is constructed from a range of sources. <p>Key knowledge Viking invasion routes Viking invasion tactics Ancient war methods Viking prowess as sailors</p>		<p>real-life problem</p> <ul style="list-style-type: none"> • Pupils know how To use formulae to calculate area and perimeter of shapes.
<p>Week 4</p>	<p>LO: To explore the effects of water resistance.</p> <p>Key skills</p> <ul style="list-style-type: none"> • To be able to use test results to make predictions to set up further comparative and fair tests. • To be able to plan a scientific enquiry that will answer a question. <p>Key knowledge</p> <ul style="list-style-type: none"> • Whenever an object moves through water, it experiences the force of water resistance. Water resistance pushes objects back, making it hard for them to move through water. • Objects that do not experience much water resistance are called streamlined. 	<p>LO To investigate how recent excavations have changed our view of the Vikings</p> <p>Key skills</p> <ul style="list-style-type: none"> • Note connections, contrasts and trends over time • Develop the appropriate use of historical terms. • Regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. • Construct informed responses that involve thoughtful selection and organisation of relevant historical information. • Understand how our knowledge of the past is constructed from a range of sources. <p>Key knowledge Viking settlements Common Viking behaviours Analysis of Viking artifacts and understanding of how they were used</p>	<p>Lo: To investigate the story of Guru Nanak and the Cobra.</p> <p>Key skills:</p> <ul style="list-style-type: none"> - Investigation - <p>Key Knowledge:</p> <ul style="list-style-type: none"> - To know the story of Guru Nanak and the Cobra - To know how the story applies to sikhs and non sikhs - To identify own morals 	<p>LO: To be able to use text variables in a formula</p> <p>Key Skills:</p> <ul style="list-style-type: none"> • To Learn to create formulae that use text variables. Calculate how many days in x amount of years • <p>Key Knowledge:</p> <ul style="list-style-type: none"> • Pupils can create simple formulae that use different variables. • Pupils can create a formula that will work out how many days there are in x number of weeks or years.

<p style="text-align: center;">Week 5</p>	<p>LO: To investigate the effects of friction.</p> <p>Key skills</p> <ul style="list-style-type: none"> To be able to report and present findings from enquiries, including conclusions, causal relationships and explanations. <p>Key knowledge</p> <ul style="list-style-type: none"> Friction is a force that acts between two surfaces or objects that are moving, or trying to move across each other. Friction always acts in the opposite direction to the moving object, and always slows a moving object down. All surfaces create friction on an object moving across them. Air resistance and water resistance are both forms of friction. 	<p>LO To study Viking place names to draw conclusions about Viking settlements</p> <p>Key skills</p> <ul style="list-style-type: none"> Note connections, contrasts and trends over time Develop the appropriate use of historical terms. Regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. Construct informed responses that involve thoughtful selection and organisation of relevant historical information. Understand how our knowledge of the past is constructed from a range of sources. <p>Key knowledge</p> <p>Viking place names Viking naming conventions Viking impact on modern Britain Viking influence on our way of life</p>	<p>Lo: To evaluate my understanding of Sikh stories</p> <p>Key skills:</p> <ul style="list-style-type: none"> Discernment Evaluation <p>Key Knowledge :</p> <ul style="list-style-type: none"> To understand the difference between different stories in sikhism To know how the stories support the morals in sikhism To know how to persuade someone into accepting your view. 	<p>LO: To create a spreadsheet</p> <p>Key Skills:</p> <ul style="list-style-type: none"> To use a spreadsheet to help plan a school cake sale. To open and create a spreadsheet using advanced formula <p>Key Knowledge:</p> <ul style="list-style-type: none"> Pupils know how to use a spreadsheet to model a real-life situation and come up with solutions that can be practically applied.
<p style="text-align: center;">Week 6</p>	<p>LO: To explore and design mechanisms.</p> <p>Key skills</p> <ul style="list-style-type: none"> To be able to recognise and control variables. To be able to use relevant scientific language and illustrations to discuss, communicate and justify scientific ideas. <p>Key knowledge</p>	<p>LO To debate whether the Vikings should be remembered as raiders or settlers</p> <p>Key skills</p> <ul style="list-style-type: none"> Note connections, contrasts and trends over time Develop the appropriate use of historical terms. Regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. Construct informed responses that 	<p>LO: To express my own thoughts on Sikhism</p> <p>Key Skills:</p> <ul style="list-style-type: none"> Expression Reflection <p>Key knowledge:</p> <ul style="list-style-type: none"> To know how to reflect on own understanding To know how parts of the religion can be seen in their own way of life. To know that religions have different aspects which 	

	<ul style="list-style-type: none">• To recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. <p>Resources: https://www.stem.org.uk/elibrary/resource/35619</p>	<p>involve thoughtful selection and organisation of relevant historical information.</p> <ul style="list-style-type: none">• Understand how our knowledge of the past is constructed from a range of sources. <p>Key knowledge Impact of Vikings on modern Britain</p>	<p>make them unique.</p>	
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