

# We are technicians



Successful learners

## Areas of Learning

**As Historians** we will continue to develop our chronological knowledge and understanding of British history. We will discover how the invasion of the Scots from Ireland impacted on what is now Scotland. We will answer historical questions as to why invaders like the Scots and also the Anglo Saxons settled in the UK and how these settlers have shaped Britain as we know it today. We will learn how they developed and used tools and compare this to modern day advancing technologies and what comprised their everyday life.

**As Scientists** we will identify common appliances that use electrical power. We will create simple series circuits and make systematic observations to evaluate whether a bulb will work and how bright it shines. Using labelled diagrams and correct symbols associated with electrical circuits, we will document our findings. We will introduce switches to our circuits to develop our understanding of open and closed circuits. Finally in groups we will plan and carry out a scientific investigation to find out which materials are conductors and which are insulators.

**As Design Technologists** the class will carry out research on various toys that are created from simple circuits. We will develop design criteria for a game that could be used at the Christmas Fete to make money for the school. We will develop and communicate our ideas through annotated sketches and prototypes. In small groups we will then make our final designs using appropriate materials and tools to ensure practicality for purpose. These will form a stall at the fete where we will evaluate and get participants to evaluate our designs. We will also create cards that use LED circuits in their design.

**As Musicians** we will study famous composers and their compositions. Learning about dynamics, tempo, rhythm and pitch, we will investigate percussion instruments and use our voices to create melodies.

**As Users of technology** we will investigate communication using technology, noting the risks that online communications carry. We will contribute to our class webpages, and develop our understanding of copyright. We will also look at how bugs can be fixed when coding. We will use software to help us enhance our keyboard skills.

**As Speakers of other languages** We will develop confidence in speaking French as a foreign language and learn new vocabulary to talk to our friends about objects in the classroom. We will compare school life in France to our own school experience. We will use songs and stories to help with our understanding of sentence structure.

Confident individuals

### Enterprise

Production lines and manufacturing  
Product development: cost and mark up, design and packaging

Responsible Citizens

### Enrichment

Traders and settlers artefact box  
Visit to Grantham Museum  
Dance competition entry  
Road safety week  
Enterprise week

### Spiritual & Moral

We will consider Anglo Saxon burial customs of both important and everyday people. We will compare this with state funerals that are held to commemorate the death of royalty in modern history.

### Communities

Class assembly  
Christmas production  
Singing in the community

History Key Objectives	Milestone 2
<p>To investigate and interpret the past</p> <p>To understand chronology</p> <p>To build an overview of world history</p> <p>To communicate historically</p>	<ul style="list-style-type: none"> <li>• Use evidence to ask questions and find answers to questions about the past.</li> <li>• Suggest suitable sources of evidence for historical enquiries.</li> <li>• Suggest causes and consequences of some of the main events and changes in history.</li>   <li>• Place events, artefacts and historical figures on a time line using dates.</li> <li>• Understand the concept of change over time, representing this, along with evidence, on a time line.</li> <li>• Use dates and terms to describe events.</li>   <li>• Give a broad overview of life in Britain from ancient until medieval times</li> <li>• Describe the social, ethnic, cultural or religious diversity of past society</li> <li>• Describe and characteristic features of the past, including areas, beliefs, attitudes and experiences of men, women and children.</li>   <li>• Use appropriate historical vocabulary to communicate, including: dates, time period, era, change, chronology.</li> <li>• Use literacy, numeracy and computing skills to a good standard in order to communicate information about the past.</li> </ul>
Geography Key Objectives	Milestone 2
<p>To investigate places</p>	<ul style="list-style-type: none"> <li>• Ask and answer geographical questions about the physical and human characteristics of a location.</li> <li>• Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, including hills, mountains, cities, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time.</li> </ul>
Science Key Objectives	Milestone 2
<p>To work scientifically</p> <p>To understand electric circuits</p>	<ul style="list-style-type: none"> <li>• Ask relevant questions.</li> <li>• Set up simple practical enquiries &amp; comparative &amp; fair tests.</li> <li>• Make accurate measurements using standard units, using a range of equipment, e.g. thermometers and data loggers.</li> <li>• Gather, record, classify and present data in a variety of ways to help in answering questions.</li> <li>• Record findings using simple scientific language, drawings, labelled diagrams, bar charts and tables.</li> <li>• Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</li> <li>• Use results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests.</li> <li>• Identify differences, similarities or changes related to simple, scientific ideas and processes.</li> <li>• Use straightforward, scientific evidence to answer questions or to support their findings</li>   <li>• Identify common appliances that run on electricity.</li> <li>• Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.</li> <li>• Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.</li> <li>• Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.</li> <li>• Recognise some common conductors and insulators, and associate metals with being good conductors.</li> </ul>
Computing Key Objectives	Milestone 2
<p>To code</p>	<p>Use specified screen coordinates to control movement.</p> <ul style="list-style-type: none"> <li>• Set the appearance of objects and create sequences of changes</li> <li>• Create and edit sounds. Control when they are heard, their volume, duration and rests.</li> <li>• Control the shade of pens.</li> <li>• Specify conditions to trigger events.</li> </ul>

	<ul style="list-style-type: none"> <li>• Use IF THEN conditions to control events or objects.</li> <li>• Create conditions for actions by sensing proximity or by waiting for a user input (such as proximity to a specified colour or a line or responses to questions).</li> <li>• Use variables to store a value.</li> <li>• Use the functions define, set, change, show and hide to control the variables.</li> <li>• Use the Reporter operators</li> </ul> <p>() + ()  () - ()  () * ()  () / ()  to perform calculations.</p>
<b>D/T Key Objectives TERM 2</b>	<b>Milestone 2</b>
<p>To design, make and evaluate</p> <p>To master practical skills (electrical and electronics)</p> <p>To take inspiration from design throughout history</p>	<ul style="list-style-type: none"> <li>• Design with purpose by identifying opportunities to design.</li> <li>• Make products by working efficiently (such as by carefully selecting materials).</li> <li>• Refine work and techniques as work progresses, continually evaluating the product design.</li> <li>• Use software to design and represent product designs.</li> </ul> <ul style="list-style-type: none"> <li>• Create series and parallel circuits</li> </ul> <ul style="list-style-type: none"> <li>• Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.</li> <li>• Improve upon existing designs, giving reasons for choices.</li> <li>• Disassemble products to understand how they work.</li> </ul>
<b>PE - Games</b>	<b>Milestone 2</b>
<p>To develop practical skills in order to participate, compete and lead a healthy lifestyle.</p> <p>Hockey</p> <p>Dance and gymnastics</p> <p>Swimming both terms</p>	<ul style="list-style-type: none"> <li>• Throw and catch with control and accuracy.</li> <li>• Strike a ball and field with control.</li> <li>• Choose appropriate tactics to cause problems for the opposition.</li> <li>• Follow the rules of the game and play fairly.</li> <li>• Pass to team mates at appropriate times.</li> <li>• Lead others and act as a respectful team member.</li> </ul> <ul style="list-style-type: none"> <li>• Plan, perform and repeat sequences.</li> <li>• Move in a clear, fluent and expressive manner.</li> <li>• Refine movements into sequences.</li> <li>• Show changes of direction, speed and level during a performance.</li> <li>• Travel in a variety of ways, including flight, by transferring weight to generate power in movements.</li> <li>• Show a kinaesthetic sense in order to improve the placement and alignment of body parts (e.g. in balances experiment to find out how to get the centre of gravity successfully over base and organise body parts to create an interesting body shape).</li> <li>• Swing and hang from equipment safely (using hands).</li> </ul> <ul style="list-style-type: none"> <li>• Swim between 25 and 50 metres unaided.</li> <li>• Use more than one stroke and coordinate breathing as appropriate for the stroke being used.</li> <li>• Coordinate leg and arm movements.</li> <li>• Swim at the surface and below the water.</li> </ul>

French	Milestone 2
To speak confidently	<ul style="list-style-type: none"><li>• Understand the main points from spoken passages.</li><li>• Ask others to repeat words or phrases if necessary.</li><li>• Ask and answer simple questions and talk about interests.</li><li>• Take part in discussions and tasks.</li><li>• Demonstrate a growing vocabulary.</li></ul>
To write imaginatively	<ul style="list-style-type: none"><li>• Write a few short sentences using familiar expressions.</li><li>• Write short phrases from memory with spelling that is readily understandable.</li></ul>