

Term: Autumn 2 Topic:

Class Teacher: HS/MC Year group: 6

Week	English Class Novel: Farm Boy- Michael Murpurgo The Extraordinary Cases of Sherlock Holmes	Maths Maths - Whiterose BIG MATHS	Science Topic: Electricity	TOPIC <del>HIST</del> /GEOG/ Industrial Revolution - Changes in Transport	Art/DT - Design, Make, evaluate a balloon powered car	Computing 5.3 Video Editing	(SMSC & Health) RE/PSHE/FRENCH /MUSIC/ART/DT
1	<p><b>Writing: Science fiction</b> <b>Story:</b> The Girl and the Robot</p> <p>To use a thesaurus to develop word understanding and build a bank of synonyms and antonyms.</p> <p>To proofread and edit work, checking for spelling and punctuation errors.</p> <p>To use the correct tense throughout a piece of writing.</p> <p>To add precision, detail and qualification using prepositional phrases and adverbs.</p> <p><b>Reading:</b> The Window - Picture Book</p> <p>LO: To participate in discussion about what is read, taking turns and listening and contributing to what others say - visualising focus</p> <p>LO: To identify language features of a text and discuss how they contribute to the meaning/ to be able to</p>	<p><b>Whiterose - block 2</b> <b>4 operations</b></p> <p>Assessment written calculations</p> <p>Common multiples</p> <p>Primes to 100</p> <p>Square and cube numbers</p> <p>Order of operations</p>	<p>NC: Identifying scientific evidence that has been used to support or refute ideas or arguments</p> <p>LO: to explain the importance of the major discoveries in electricity</p> <p>Prior Knowledge: Children have covered Electricity in Y4</p> <p>Knowledge: Benjamin Franklin discovered that lightning was electrical and was the first person to store electricity Alessandro Volta invented the first battery Electricity changed people's daily lives (children should be able to give examples such as washing machines etc)</p> <p>Vocabulary: Electricity, Thomas Edison, Nikola Tesla, Alessandro Volta, Michael Faraday, home, alternating current, direct current, battery, cell</p>	<p>NC: They should understand how our knowledge of the past is constructed from a range of sources.</p> <p>They should construct informed responses that involve thoughtful selection and organisation of relevant historical information.</p> <p>LO: To understand why Industrial Revolution was important to Britain</p> <p>Use of pictures as a source</p> <p>Knowledge: To know the industrial revolution is a process where economy is dominated by machines 1733-1913</p> <p>Vocabulary: Industrial Machine Change</p>	<p>NC: Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].</p> <p>LO: To design a car for the future</p> <p>Knowledge: To know that real life designers are constantly innovating and redesigning to improve things for customers</p> <p>Vocabulary: Customer Cars Future Environmental effects Driverless</p>	<p><b>ESafety lesson2:</b> I can identify personal information.</p> <p>I can explain why someone might have an online friendship.</p> <p>I can explain what to do if I am asked or told something online which makes me uncomfortable.</p> <p>I can explain some of the dangers of revealing personal information to an online friend</p>	<p><b>French:</b> <b>Unit 20 - Les cadeaux</b></p> <p>1. Know the vocabulary for a range of presents</p> <p>2. Be able to say and write what they would like for Christmas in French</p> <p>3. Be able to say what they would buy for other family members</p> <p><b>PE: Year 5/6</b> <b>Netball</b></p> <p>Pupils will apply a refined understanding of attacking skills and defensive skills, that will be executed accurately and consistently.</p> <p>Key Success Criteria Pupils will demonstrate resourcefulness and problem solving skills</p>

	<p>clarify the meaning of new and unfamiliar words</p> <p>LO: To ask and answer retrieval questions</p> <p>LO: To ask and answer inference questions and justify with evidence from the text (PEE)</p> <p>LO: To answer SATs style questions</p>		<p>Task:</p> <p><a href="https://www.bbc.co.uk/bitesize/topics/z2882hv/articles/zcwnv9q">https://www.bbc.co.uk/bitesize/topics/z2882hv/articles/zcwnv9q</a></p> <p>Brief what is electricity and how do we use it?</p> <p><a href="https://www.bbc.co.uk/bitesize/clips/z4spyrd">https://www.bbc.co.uk/bitesize/clips/z4spyrd</a></p> <p>Where does electricity come from?</p> <p><a href="https://www.youtube.com/watch?v=RGK6nlE6hw0">https://www.youtube.com/watch?v=RGK6nlE6hw0</a></p> <p>History of electricity - lightning, animals, static electricity</p> <p><a href="https://www.whatihavelearnedteaching.com/teaching-ideas-for-static-electricity/#videos">https://www.whatihavelearnedteaching.com/teaching-ideas-for-static-electricity/#videos</a></p> <p>static electricity</p> <p>Match each item for before and after electrical inventions.</p> <p><u>Challenge:</u></p> <p>How has electricity changed our lives?</p> <p>What difference have these inventions made?</p> <p><b>Enrichment activity - Electrical safety</b></p> <p>NC: Pupils should be taught to take the necessary precautions for working safely with electricity.</p>	<p>Task:</p> <p>Look at 2 paintings of Kersal Moor 1820 and 1852</p> <p>How has England changed between 1750 and 1900?</p> <p>How has transport changed?</p> <p>Why do you think these changes happened?</p> <p>Watch:</p> <p><a href="https://www.youtube.com/watch?v=ZuKf03Rc-OA">https://www.youtube.com/watch?v=ZuKf03Rc-OA</a> - song</p>	<p>concept</p> <p>Task:</p> <p>Watch some of these:</p> <p><a href="https://www.youtube.com/watch?v=acrF4COrxpI">https://www.youtube.com/watch?v=acrF4COrxpI</a></p> <p>VW cars and cities 2030</p> <p><a href="https://www.youtube.com/watch?v=nn6aqOyt2TE">https://www.youtube.com/watch?v=nn6aqOyt2TE</a></p> <p>Toyota concept cars (10mins long, don't watch all)</p> <p><a href="https://www.youtube.com/watch?v=th2cgZMU90">https://www.youtube.com/watch?v=th2cgZMU90</a></p> <p>Concept cars</p> <p><a href="https://www.youtube.com/watch?v=rzuemoK21EM">https://www.youtube.com/watch?v=rzuemoK21EM</a></p> <p>How to design a car for the future (12 mins long, don't watch all)</p> <p>Design a car for a specific group.</p>		<p>by creating, applying and then adapting a range of attacking and defending tactics.</p> <p>Pupils will effectively apply their tactics, demonstrating a clear understanding of the role each team member will perform and will ensure the team feels motivated.</p> <p>Pupils will constantly apply life skills such as integrity and self discipline by playing by the rules and leading others by example</p> <p><b>Jigsaw (PSHE) Celebrating Difference</b></p> <ol style="list-style-type: none"> <li>1. Am I normal?</li> <li>2. Understanding difference</li> <li>3. Power struggles</li> <li>4. Why Bully</li> <li>5. Celebrating difference</li> <li>6. Celebrating difference</li> </ol>
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2	<p><b>Writing: Science fiction Story:</b> The Girl and the Robot</p> <p>To use a thesaurus to develop word understanding and build a bank of synonyms and antonyms.</p> <p>To proofread and edit work, checking for spelling and punctuation errors.</p> <p>To use the correct tense throughout a piece of writing.</p> <p>To add precision, detail and qualification using prepositional phrases and adverbs.</p> <p><b>Reading:</b> The Window - Picture Book</p> <p>Reading LO: To participate in discussion about what is read, taking turns and listening and contributing to what others say - visualising focus</p> <p>LO: To identify language features of a text and discuss how they contribute to the meaning/ to be able to</p>	<p><b>Whiterose - block 2 4 operations</b></p> <p>Mental calculations</p> <p>Reason from known facts</p> <p>Assessment 4 ops</p> <p><b>Block 3 Fractions</b></p> <p>Equivalent fractions</p> <p>Simplify fractions</p>	<p>NC: Use recognised symbols when representing a simple circuit in a diagram</p> <p>LO: to recognise and draw scientific circuit symbols</p> <p>Prior Knowledge: children will have learnt the names of parts of circuits in Y4</p> <p>Knowledge: Know the symbols for relevant components from the vocabulary list</p> <p>Vocabulary: Bulb, battery, cell, wires, switch, motor, buzzer, scientific, circuit, diagram</p> <p>Task: Label, convert and draw circuit diagrams using symbols.</p>	<p>NC: They should understand how our knowledge of the past is constructed from a range of sources.</p> <p>They should construct informed responses that involve thoughtful selection and organisation of relevant historical information.</p> <p>LO: To understand the impact of machines</p> <p>Use of pictures as a source</p> <p>Knowledge: To know about the impact of factories and machinery on individuals</p> <p>To understand how historians use different sources to draw conclusions</p> <p>Vocabulary: Factory Machine Children Individuals Life style</p> <p>Task:</p>	<p>NC: use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</p> <p>LO: To investigate aerodynamics</p> <p>Knowledge: To know that speed comes from shape and design</p> <p>Vocabulary: Investigate Aerodynamics Shape Speed</p> <p>Task: Use different shaped 3D shapes, constructing nets to investigate aerodynamics and the best nose shape for vehicles - link back to visit to train museum and the difference between the rocket and the bullet.</p>	<p>Lesson 1: What's Video?</p> <p>To explain what makes a video effective</p> <p>I can explain that video is a visual media format</p> <p>I can identify features of videos</p> <p>I can compare features in different videos</p>	

	<p>clarify the meaning of new and unfamiliar words LO: To ask and answer retrieval questions LO: To ask and answer inference questions and justify with evidence from the text (PEE) LO: To answer SATs style questions</p>			<p>Look at photos of children in factories</p> <p>Watch <a href="https://www.youtube.com/watch?v=iTQzgLf0CHA">https://www.youtube.com/watch?v=iTQzgLf0CHA</a></p> <p>Write a diary entry as if you work in a factory. What are conditions like? How do you feel?</p>			
3	<p><b>Writing: Science fiction Story:</b> The Girl and the Robot-next genre to begin this week</p> <p>To use a thesaurus to develop word understanding and build a bank of synonyms and antonyms.</p> <p>To proof read and edit work, checking for spelling and punctuation errors.</p> <p>To use the correct tense throughout a piece of writing.</p> <p>To add precision, detail and qualification using prepositional phrases and adverbs.</p> <p><b>Reading:</b> Amazing Transport Non-fiction Book</p> <p>Reading LO: To participate in discussion about what is read, taking turns and listening and contributing to</p>	<p><b>Block 3 Fractions</b></p> <p>Improper fractions to mixed numbers</p> <p>Mixed numbers to improper fractions</p> <p>Fractions on a number line</p> <p>Compare and order (denominator)</p> <p>Compare and order (numerator)</p>	<p>Recap of week 2 - extending learning and understanding</p> <p>NC: Use recognised symbols when representing a simple circuit in a diagram</p> <p>LO: to recognise and draw scientific circuit symbols</p> <p>Prior Knowledge: children will have learnt the names of parts of circuits in Y4</p> <p>Knowledge: Know the symbols for relevant components from the vocabulary list</p> <p>Vocabulary: Bulb, battery, cell, wires, switch, motor, buzzer, scientific, circuit, diagram</p> <p>Task: Label, convert and draw circuit diagrams using symbols.</p>	<p>NC: Pupils should continue to develop a chronologically secure knowledge and understanding of British history</p> <p>LO: To understand different types of transport</p> <p>Knowledge: Know there are different types of transport and that transport changes over time</p> <p>Vocabulary: Transport Difference Changes</p> <p>Task: How many different types of transport can you think of? How are they the same?</p>	<p>NC: generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>LO: To design a balloon powered car</p> <p>Knowledge: To use investigations to generate design Understand the importance of detailed annotated sketches, cross-section and exploded diagrams</p> <p>Vocabulary: Design Annotated sketch Cross sectional diagram Exploded diagram</p>	<p>Lesson 2: Filming Techniques</p> <p>To use a digital device to record video I can identify and find features on a digital video recording device I can experiment with different camera angles I can recognise camera angles in a video</p>	

	<p>what others say - visualising focus</p> <p>LO: To identify language features of a text and discuss how they contribute to the meaning/ to be able to clarify the meaning of new and unfamiliar words</p> <p>LO: To ask and answer retrieval questions</p> <p>LO: To ask and answer inference questions and justify with evidence from the text (PEE)</p> <p>LO: To answer SATs style questions</p>		<p>Predict if circuits will work and test circuits</p>	<p>How are they different?</p> <p>Identify and classify different modes of transport</p>	<p>Task: design a fast balloon powered car</p>		
4	<p><b>Biography of an imaginary engineer</b> (links back to recent residential)</p> <p>I adapt the grammar and vocabulary used in my writing to suit the audience and purpose.</p> <p>To use paragraphs correctly so that each one has a clear topic and has a signal of change in time, place or event.</p> <p>I use the correct tense throughout a piece of writing.</p> <p>I effectively draft my work so that I enhance meaning and adapt grammar choices for effect.</p> <p><b>Reading:</b> Amazing Transport Non-fiction Book</p> <p>Reading LO: To participate in discussion about what is</p>	<p><b>Block 3 Fractions</b></p> <p>Add and subtract fractions</p> <p>Add and subtract fractions</p> <p>Add mixed numbers</p> <p>Add fractions</p> <p>Subtract mixed numbers</p>	<p>NC: Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</p> <p>LO: to observe and explain the effects of differing volts in a circuit</p> <p>Prior Knowledge: Children learnt how to represent circuits using symbols in previous lesson</p> <p>Knowledge: Increasing the voltage in a circuit will increase the brightness of a bulb and the volume of a buzzer</p> <p>Vocabulary: Voltage, circuit, bulb, wires, cell, battery, buzzer, motor, switch, circuit diagram, brightness, loudness, increase, decrease</p>	<p>NC: Pupils should continue to develop a chronologically secure knowledge and understanding of British history</p> <p>LO: To know how transport has evolved</p> <p>Knowledge: Know there are different types of transport and that transport changes over time</p> <p>Vocabulary: Transport Difference Changes</p> <p>Task: How has transport evolved over time? (Think about our visit to the train museum.)</p>	<p>NC: select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p> <p>LO: To make my car design</p> <p>Knowledge: To select equipment and develop co-operation to succeed and complete a task</p> <p>Vocabulary:</p>	<p>Lesson 3: Using a Storyboard</p> <p>To capture video using a range of techniques</p> <p>I can suggest filming techniques for a given purpose</p> <p>I can capture video using a range of filming techniques</p> <p>I can review how effective my video is</p>	

	<p>read, taking turns and listening and contributing to what others say – visualising focus</p> <p>LO: To identify language features of a text and discuss how they contribute to the meaning/ to be able to clarify the meaning of new and unfamiliar words</p> <p>LO: To ask and answer retrieval questions</p> <p>LO: To ask and answer inference questions and justify with evidence from the text (PEE)</p> <p>LO: To answer SATs style questions</p>		<p>Task: Watch the following clip: <a href="https://www.bbc.co.uk/bitesize/clips/zvy7tfr">https://www.bbc.co.uk/bitesize/clips/zvy7tfr</a> Discuss the meaning of the term 'volt'</p> <p>Children observe the effect of increasing the voltage on bulbs and buzzers</p>	<p>Order the transport timeline</p> <p>Watch <a href="https://www.youtube.com/watch?v=FaLCQo8NJFA&amp;feature=emb_logo">https://www.youtube.com/watch?v=FaLCQo8NJFA&amp;feature=emb_logo</a> Brief History of Transport <a href="https://www.timetoast.com/timelines/history-of-transportation-29811a5f-dcfa-4e5d-a9d2-5aab679f1462">https://www.timetoast.com/timelines/history-of-transportation-29811a5f-dcfa-4e5d-a9d2-5aab679f1462</a> Interactive timeline (click list if easier to see)</p>	<p>Make Select Materials Equipment Problem solve</p> <p>Task: 2 weeks to make a balloon powered car</p>		
5	<p>Biography of an imaginary engineer (links back to recent residential)</p> <p>I adapt the grammar and vocabulary used in my writing to suit the audience and purpose.</p> <p>To use paragraphs correctly so that each one has a clear topic and has a signal of change in time, place or event.</p> <p>I use the correct tense throughout a piece of writing.</p> <p>I effectively draft my work so that I enhance meaning and adapt grammar choices for effect.</p> <p><b>Reading:</b> Lord Fox/Ghost Story/ Testbase</p>	<p><b>Block 3 Fractions</b></p> <p>Subtract fractions</p> <p>Mixed addition and subtraction</p> <p>Divide fractions by integers</p> <p>Multiply fractions by integers</p> <p>Divide fractions by integers</p>	<p>NC: Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</p> <p>LO: to plan an investigation and understand variations in how components function</p> <p>Prior Knowledge: Children learnt how to represent circuits using symbols in a previous lesson</p> <p>Knowledge: When planning investigations, only one variable can be changed When making predictions, we must use scientific knowledge as a basis</p> <p>Vocabulary:</p>	<p>NC: Pupils should continue to develop a chronologically secure knowledge and understanding of British history</p> <p>LO: To know how transport has evolved</p> <p>Knowledge: To know individual achievements and personal contributions</p> <p>Vocabulary: Inventor Invention</p> <p>Task: Investigate an inventor:</p> <ul style="list-style-type: none"> <li>Rudolf Diesel</li> <li>John Dunlop</li> </ul>	<p>Continue from week 4</p> <p>Test the cars</p>	<p>Lesson 4 Planning a video</p> <p>To capture video using a range of techniques</p> <p>I can suggest filming techniques for a given purpose</p> <p>I can capture video using a range of filming techniques</p> <p>I can review how effective my video is</p>	



	<p>Reading LO: To participate in discussion about what is read, taking turns and listening and contributing to what others say - visualising focus</p> <p>LO: To identify language features of a text and discuss how they contribute to the meaning/ to be able to clarify the meaning of new and unfamiliar words</p> <p>LO: To ask and answer retrieval questions</p> <p>LO: To ask and answer inference questions and justify with evidence from the text (PEE)</p> <p>LO: To answer SATs style questions</p>		<p>Bulbs, cell, battery, buzzers, investigation, plan, fair test, comparative test, practical enquiry, wire, length</p> <p>Task: Children work in small groups to plan an investigation to answer the question: Does wire length affect how components in a circuit work?</p>	<ul style="list-style-type: none"> <li>• George Stephenson</li> <li>• The Wright Brothers</li> <li>• Isambard Kingdom Brunel</li> <li>• Leonardo da Vinci</li> </ul>			
6	<p><b>Writing:</b> imaginative and descriptive poetry</p> <p>I can use a thesaurus to develop word understanding and build a bank of antonyms and synonyms.</p> <p><b>Reading: poem T'was the night before Christmas</b></p> <p>Reading LO: To participate in discussion about what is read, taking turns and listening and contributing to what others say - visualising focus</p> <p>LO: To identify language features of a text and discuss how they contribute to the meaning/ to be able to clarify the meaning of new and unfamiliar words</p>	<p><b>Block 3 Fractions</b></p> <p>4 rules with fractions</p> <p>Fractions of amounts</p> <p>Fractions of amount</p> <p>Assessment - fractions</p> <p><b>Block 4 Position and Direction</b></p> <p>The first quadrant</p>	<p>LO: To research a famous scientist</p> <p>Knowledge: To understand that scientists do not work alone, but use the findings and research of those who have gone before to make new discoveries</p> <p>Vocabulary: Scientist Contribution</p> <p>Task: Choose a famous scientist to research and produce a powerpoint about</p> <ul style="list-style-type: none"> <li>• Michael Faraday</li> <li>• Thomas Edison</li> <li>• Nikola Tesla</li> <li>• Heinrich Hertz</li> <li>• Alessandro Volta</li> </ul>	<p>NC: They should construct informed responses that involve thoughtful selection and organisation of relevant historical information.</p> <p>Knowledge: That there are positive factors and negative factors in using things</p> <p>Vocabulary: Positive Negative Benefits</p> <p>Task: LO: To design a transport board game</p>	<p>NC: investigate and analyse a range of existing products</p> <p>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <p>understand how key events and individuals in design and technology have helped shape the world</p> <p>LO: To evaluate my balloon powered car</p> <p>Knowledge: To know that evaluation is a vital part of the process to</p>	<p>Lesson 5 Importing and Editing Video</p> <p>To identify that video can be improved through reshooting and editing</p> <p>I can store, retrieve, and export my recording to a computer</p> <p>I can explain how to improve a video by reshooting and editing</p> <p>I can select the correct tools to make edits to my video</p>	

	<p>LO: To ask and answer retrieval questions</p> <p>LO: To ask and answer inference questions and justify with evidence from the text (PEE)</p> <p>LO: To answer SATs style questions</p>		<p>Know when/where they lived and what their scientific contribution has been.</p> <p>And complete the science assessment on electricity.</p> <p>SEN: complete a close activity based on simple ideas.</p>	<p>And complete Theme assessment</p> <p>SEN/EAL differentiated as needed</p>	<p>aid in future design and making</p> <p>Vocabulary:</p> <p>Evaluate</p> <p>Successes</p> <p>Improvements</p> <p>Task:</p> <p>Discussion and then complete the evaluation sheet</p>		
7	<p><b>Short writing burst</b> - scene description and character description.</p> <p>I can use a thesaurus to develop word understanding and build a bank of antonyms and synonyms.</p> <p>I add precision, detail and qualification using prepositional phrases and adverbs.</p> <p>I can effectively draft my work so that I enhance meaning and adapt my grammar choices for effect.</p> <p><b>Reading: poem T'was the night before Christmas</b></p> <p>Reading LO: To participate in discussion about what is read, taking turns and listening and contributing to what others say - visualising focus</p> <p>LO: To identify language features of a text and discuss how they contribute to the meaning/ to be able to</p>	<p><b>Block 4</b></p> <p><b>Position and Direction</b></p> <p>4 quadrants</p> <p>Translation</p> <p>Reflections</p> <p>Assessment - position and direction</p>	Christmas Activities	Christmas Activities	Christmas Activities	Christmas Activities	



	<p>clarify the meaning of new and unfamiliar words</p> <p>LO: To ask and answer retrieval questions</p> <p>LO: To ask and answer inference questions and justify with evidence from the text (PEE)</p> <p>LO: To answer SATs style questions</p>						
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