

Summer 1: How do we organise ourselves

Driver: History

Outcome: DT: *What's the best way to produce electricity?*

Core Text:

Electric Wizard- How Nicolai Tesla lit up the world.
The boy who harnessed the wind










Writing Genres:

Balanced argument: 3 weeks For
Balanced argument: 3 weeks Against

Vocabulary

Electrical circuit, hydro, solar, turbine, AC/DC currents, insulator, conductor, exploded diagram, functionality, renewable

Subjects:	Learning Objectives:	Activities
<p>Science: Electricity</p> 	<p>I can identify common appliances that run on electricity. I can construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. I can 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. I can recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. I can recognise some common conductors and insulators, and associate metals with being good conductors"</p>	<p>Focus on circuits and buzzers Which metal is the best conductor of electricity? How does the thickness of a conducting material affect how bright the lamp is? How would you group these electrical devices based on where the electricity comes from? Which room has the most electrical sockets in a house? How long does a battery light a torch for? How does a light bulb work? How has electricity changed the way we live?</p>
<p>History:</p> 	<p>Place some historical periods in a chronological framework Use historic terms related to the period of study Use sources of information in ways that go beyond simple observations to answer questions about the past Understand that sources can contradict each other Use a variety of resources to find out about aspects of life in the past</p>	<p>How has electricity developed over time? Explore different sources- newspaper articles- about people's opinions on and the negative impacts of electricity</p>
<p>Design and Technology:</p> 	<p>Use knowledge of existing products to design a functional and appealing product for a particular purpose and audience Create designs using exploded diagrams Use his/her knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them Use techniques which require more accuracy to cut, shape, join and finish his/her work e.g. cutting internal shapes, slots in frameworks Consider how existing products and his/her own finished products might be improved and how well they meet the needs of the intended user Apply techniques he/she has learnt to strengthen structures and explore his/her own ideas Understand and use electrical systems in products</p>	<p>STEM week Create windmills which include a light</p>
<p>Computing:</p> 	<p>Computing systems and networks – The Internet</p>	<p>Consider which websites are accurate and reliable- link to history (reliable sources)</p>
<p>PSHE</p> 	<p>Internet safety and harms Media literacy- influences and importance of protecting personal information</p>	<p>Explore impact of electricity and the internet</p>
<p>Action/Exhibition: Hold an assembly to showcase why we should reduce electrical usage across school</p>		
<p>Trips</p>	<p>Science museum- electricity focus (Making the modern world, secret life of the home, wonder lab, Energy revolution: The Adani Green Energy Gallery)</p>	
<p>To be taught in a block</p>	<p> PSHE: Alcohol & Tobacco education  RE: Islam: Teachings and Action: What are the 5 pillars of Islam?</p>	