

**The Sultan's School Year 2 Science Medium Term Plan Block 3 2021-2022**

Week	Unit	Key Targets and Learning Objectives	Key Activity	Key Vocabulary
Working Scientifically		<ul style="list-style-type: none"> <li>• Using observation techniques to gather information</li> <li>• Reporting data collection through diagrams and/or tables</li> <li>• Labelling diagrams</li> </ul> Making conclusions based on scientific fact and personal observation		
1	Electricity	<ul style="list-style-type: none"> <li>• Demonstrate understanding of the basic concept of electricity</li> <li>• Classify everyday appliances that require electricity either from mains or battery</li> <li>• Explain the basic functions of the components of a simple circuit</li> <li>• Understand safety and precautions when working with electricity</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss the basic concept of electricity and safety (videos)</li> <li>• Explore the basic function of each component of a simple electrical circuit</li> <li>• Identify and label the components of a simple electric circuit</li> <li>• Explore a variety of classroom objects, investigating whether they use electricity or not.</li> <li>• Classify objects into categories, i.e. stereo and speakers produce noise, lights and, torches, lamps produce light, laptops and TV's produce images etc</li> <li>• Show a developing knowledge of why some appliances use batteries as opposed to the mains and show an understanding of the dangers of batteries.</li> <li>• Discuss safety with electricity and to create a poster reflecting what they have learned.</li> </ul>	Components Battery Circuit Bulb Current Label classify
2		<ul style="list-style-type: none"> <li>• Differentiate between an open and closed circuit and predict which one will work</li> </ul>	<ul style="list-style-type: none"> <li>• Predict whether diagrammatical representation of circuits will work, investigate their predictions.</li> </ul>	Open Closed Live

			<ul style="list-style-type: none"> <li>Construct own predictions, draw their predictions, making a record of the results following investigation.</li> </ul>	
3		<ul style="list-style-type: none"> <li>Identify and compare switches</li> </ul>	<ul style="list-style-type: none"> <li>Identify switches in the classroom and home and classify them using diagrams and tables</li> <li>Design and test switches from a range of materials, exploring conductivity</li> <li></li> </ul>	Switch Conductive Non conductive
4		<ul style="list-style-type: none"> <li>Build a simple, functioning electrical circuits with switches</li> </ul>	<ul style="list-style-type: none"> <li>Design, build, test and demonstrate their device, explaining the need for a complete circuit.</li> </ul>	
5		<ul style="list-style-type: none"> <li>Identify and classify renewable and non renewable energy sources</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>Identify the various types of renewable energy sources</li> <li>Tabulate/ Sort energy sources into renewable and non renewable</li> </ul>	Renewable Non renewable Sustainable Solar
6		<ul style="list-style-type: none"> <li>Understand the impact of non renewable energy at global and local level</li> </ul>	<ul style="list-style-type: none"> <li>Explore and discuss how non renewable energy impact the environment at both a local and global level</li> </ul>	
7		<ul style="list-style-type: none"> <li>Identify energy saving strategies for home and community</li> </ul>	<p>Create a poster explaining how we as individuals can reduce energy consumption</p> <p>Explore energy saving strategies</p>	
		<b>GLOBAL</b>	<b>Integration of Technology</b>	
		<ul style="list-style-type: none"> <li>Tie into UN SDGS</li> <li>Energy conservation</li> </ul>	<p>Videos to explore global energy issues</p> <p>Using simple circuit boards. Batteries, motors etc to build operating circuits</p>	