



| Year 8  | Energy and Electricity   | 14 Lessons  |
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| <b>Aims:</b> This unit of work is designed to introduce students to Energy and Electricity.<br><b>Links to KS4:</b><br>Chapter 2 Physics - Electricity  |  |   |
| Key Skills  | Literacy Links:  | Numeracy Links:   |
| <ul style="list-style-type: none"><li>To develop an understanding of current and electricity.</li><li>To develop an understanding of different types of energy transfers.</li><li>To develop practical skills in a Science labs.</li></ul>  | <b>Key Words:</b><br><b>Electrons, series, parallel, current, potential difference, systems, stores.</b><br>Be able to read and use these keywords within Scientific situations both verbally and written. | Be able to use Physics equations.<br>Be able to re-arrange equations. |
| Assessment  | Cross-Curricular Links   |   |
| <ul style="list-style-type: none"><li><i>Pink sheet teacher assessed activity – Electrical circuits.</i></li><li><i>50 mark test which will focus on the following key areas: Static electricity, Power &amp; energy use, Energy transfers &amp; changes, changes of systems and Energetics.</i></li></ul>  | <ul style="list-style-type: none"><li>Design Technology – electrical circuits.</li></ul>   |   |
|   | SMSC opportunities and British values  |   |
|   |  |   |
| Opportunities for further learning  |  |   |
| Homework for year 8 is set on a weekly basis. Below are a range of different activities which could be used throughout the unit.<br><b>Option 1:</b> Draw circuits.<br><b>Option 2:</b> Research how light dependent resistors are used in traffic lights.<br><b>Option 3:</b> Describe a range of scenarios where static electricity is seen in real life.<br><b>Option 4:</b> Design your own circuits.<br><b>Option 5:</b> Create a newspaper article/poster about the different stores of energy. |  |   |