# **CIMA Primary School Programme – Learning Outcomes**

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| **Activity** | **Target Group** | **Exhibition Links** | **Learning from Objects** | **National Curriculum Links** | **Identified Learning Outcomes** |
| Power: Past to Future WORKSHOP | KS2 | Mytholm Mine Display  Power for a Revolution | Archive images/photos  Wool and textile samples  Drop spindle  Coal Fossil  Mining tools  Horizontal Steam Engine  Stone Mill Tannery Water Will and Fulling Stocks | Geography:  Human and physical geography  History: A study of an aspect or theme in British history that extends pupils’ chronological knowledge beyond 1066. Maths:  Measurement  Statistics  Number  Science:  Working Scientifically Rocks  Properties and changes of materials  Forces | Pupils will be able to:   * understand the impact of steam on the industrial revolution * describe the impact of using non-renewable energy on the environment and the Earth’s climate * explain the benefits of using renewable energy and give examples * use counting, measurement and geometry skills * carry out a simple experiment to test a hypothesis; including setting up a comparative and fair test, making observations, recording findings and using results to draw simple conclusions. |
| Water Wheel Challenge TEACHERS PACK | KS2 | Power for a Revolution | Stone Mill Tannery Water Will and Fulling Stocks | Design and Technology:  Design  Make  Evaluate  Technical Knowledge  Geography:  Human and physical geography  Science:  Working Scientifically States of Matter  Forces | Pupils will be able to:   * explain the benefits of using water as a source of renewable energy * show how an axle works with a wheel as a simple machine * show understanding that the faster a turbine blades rotate the more energy is generated * carry out a simple experiment to test a hypothesis; including setting up a comparative and fair test, making observations, recording findings and using results to draw simple conclusions. |
| Materials Matter  WORKSHOP | KS2 | Machines that made machines  Classic Carpets & Quality Sweets | Variety of Quality Street tins  Model Steam Engine  Cork samples  Metal Mickey casting demo/prop  Lathe  Foundry  Pattern making objects  Toffee Boiler | Design and Technology:  Design  History: A study of an aspect or theme in British history that extends pupils’ chronological knowledge beyond 1066. Science:  Working Scientifically Properties of Materials  States of Matter | Pupils will be able to:   * describe the properties of a variety of materials and how these are connected to the function of objects * explain what the states of matter are * understand that materials can change state and that this can be used to shape objects * use observation skills * carry out a simple experiment to test a hypothesis; including setting up a comparative and fair test, making observations, recording findings and using results to draw simple conclusions. |
| Melting Chocolate Challenge  TEACHERS PACK | KS2 | Quality Sweets | MacIntosh Toffee De Luxe window  MacIntosh Toffee De Luxe tins  Quality Street tins  Toffee Boiler | Design and Technology:  Design  KS2 History:  A study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality  Science:  Working Scientifically States of Matter  Properties of Materials | Pupils will be able to:   * use observation skills * carry out a simple experiment to test a hypothesis; including setting up a comparative and fair test, making observations, recording findings and using results to draw simple conclusions. |
| Marvellous Machines WORKSHOP | KS2 | Machines that made machines  Power for a Revolution | Electrical Generator  Electric Motor  Turbine wheels  Levers  Wheels and Axles  Pulleys | Design & Technology:  Design  Make  Technical Knowledge  Science:  Electricity Forces | Pupils will be able to:   * explain that simple machines turn small forces into larger forces to make work easier * identify some simple machines as components of complex machines * explain that machines are powered by electrical energy which is converted into movement energy |
| Valuable Victorians WORKSHOP | KS2 | Mytholm Mine  Machines that made machines  Classic Carpets  Fleece to Piece | Miners safety lamp  Coal sample  Mining tools  Fire wood bundler  Refractory brick  Brass mould  Wooden Pattern  Bobbin  Shuttle  Pirn winder  Pay tins | Citizenship:  Respecting the differences between people  Design & Technology:  Make  Geography:  Human and physical geography  History: A study of an aspect or theme in British history that extends pupils’ chronological knowledge beyond 1066.  Science:  Working Scientifically States of Matter  Maths:  Number | Pupils will be able to:   * explain what impact the industrial revolution had on the lives of working-class children * ask relevant questions and use observation skills and different types of scientific enquiries to answer them |