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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Activity** | **Target Group** | **Exhibition Links** | **Learning from Objects** | **National Curriculum Links** | **Identified Learning Outcomes** |
| Power: Past to FutureWORKSHOP | KS2 | Mytholm Mine DisplayPower for a Revolution | Archive images/photosWool and textile samplesDrop spindleCoal FossilMining toolsHorizontal Steam EngineStone Mill Tannery Water Will and Fulling Stocks | Geography: Human and physical geographyHistory:A study of an aspect or theme in British history that extends pupils’ chronological knowledge beyond 1066.Maths:MeasurementStatisticsNumberScience: Working Scientifically RocksProperties and changes of materialsForces | 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:DesignMake EvaluateTechnical KnowledgeGeography: Human and physical geographyScience: Working Scientifically States of MatterForces | 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 MatterWORKSHOP | KS2 | Machines that made machinesClassic Carpets & Quality Sweets | Variety of Quality Street tinsModel Steam EngineCork samplesMetal Mickey casting demo/propLatheFoundryPattern making objects Toffee Boiler | Design and Technology:DesignHistory:A study of an aspect or theme in British history that extends pupils’ chronological knowledge beyond 1066.Science:Working ScientificallyProperties of MaterialsStates 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 ChallengeTEACHERS PACK | KS2 | Quality Sweets | MacIntosh Toffee De Luxe windowMacIntosh Toffee De Luxe tinsQuality Street tinsToffee Boiler | Design and Technology:DesignKS2 History:A study of an aspect of history or a site dating from a period beyond 1066 that is significant in the localityScience: Working Scientifically States of MatterProperties 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 machinesPower for a Revolution | Electrical GeneratorElectric MotorTurbine wheelsLeversWheels and AxlesPulleys | Design & Technology:DesignMakeTechnical KnowledgeScience:ElectricityForces | 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 MineMachines that made machinesClassic CarpetsFleece to Piece | Miners safety lamp Coal sample Mining toolsFire wood bundler Refractory brick Brass mould Wooden PatternBobbin Shuttle Pirn winder Pay tins | Citizenship:Respecting the differences between peopleDesign & Technology:MakeGeography:Human and physical geographyHistory:A study of an aspect or theme in British history that extends pupils’ chronological knowledge beyond 1066.Science:Working ScientificallyStates of MatterMaths: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
 |