

Design and make Copper Jewellery (Includes soldering practice)



Pupil Name	
Key Stage 2 Learning Points (from the National Curriculum 2014) Specific to this project.	
Sc4/4.2e	recognise some common conductors and insulators, and associate metals with being good conductors.
DT2/1.1a	use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
DT2/1.1b	generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
DT2/1.2a	select from and use a wider range of tools and equipment to perform practical tasks accurately
DT2/1.2b	select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities
DT2/1.3b	evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
DT2/1.1a	use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
DT2/1.1b	generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
DT2/1.2a	select from and use a wider range of tools and equipment to perform practical tasks accurately
DT2/1.3b	evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
Ma6/3.2b	recognise, describe and build simple 3-D shapes, including making nets
Ma4/3.2a	compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
Ma4/3.2b	identify acute and obtuse angles and compare and order angles up to 2 right angles by size
Ma4/3.2c	identify lines of symmetry in 2-D shapes presented in different orientations
Ma4/3.2d	complete a simple symmetric figure with respect to a specific line of symmetry.
<p>Evidence for meeting these strands to come from:</p> <p>Teacher observations and questioning pupils during project.</p> <p>Pupil design sheet.</p> <p>Pupils Self-Assessment on evaluation sheet.</p> <p>Peer Assessment on evaluation sheet.</p> <p>Photographs taken during making / testing process.</p> <p>It is recommended that the children investigate pictures and/ or examples of jewellery and be given time to design their work before they begin, making careful measurements and annotating their plan.</p> <p>Note: It is vital that children be made aware of the safety precautions and the potential for injury.</p>	



Key Stage 2 Learning Points (from the National Curriculum 2014) Generic to all Imagineering Projects

Science: Health and Safety - Pupils should be taught to:

- recognize that there are hazards in materials and physical processes, and assess risks and take action to reduce risks to themselves and others

Design and Technology: Knowledge, skills and understanding

Working with tools, equipment, materials and components to make quality products:

Pupils should be taught to:

- select tools, techniques and materials for making their product from a range suggested by the teacher
- suggest alternative ways of making their product, if first attempts fail
- explore the sensory qualities of materials and how to use materials and processes
- measure, cut and shape a range of materials

Evaluating processes and products:

Pupils should be taught to:

- reflect on the progress of their work as they design and make, identifying ways they could improve their products
- carry out appropriate tests before making any improvements

Design and Technology: Breadth of study

During the key stage, pupils should be taught the knowledge, skills and understanding through:

- focused practical tasks that develop a range of techniques, skills, processes and knowledge
- design and make assignments using a range of materials, including electrical and mechanical components



Pupil Project Record		Date
Name	Title of Project	
<p>Before you begin your project... Draw a picture of what you think it will look like.</p> <p>Who are you making it for? What will you do to make it more interesting / attractive to them?</p> <p>What safety rules will you need to follow? Why? What do you know about the properties of copper?</p>		
<p>When you have finished your project... Draw a diagram of your jewellery. Label the parts. (You could include a photo.)</p>		
<p>What do you think of your finished project?</p>		
<p>What would you change/improve if you did it again? Could you make it more attractive?</p>		
<p>What skills did you use to make your jewellery?</p>		
<p>What does your partner think?</p>		