



Key content – knowledge and skills	National Curriculum focus
<p>Overview - Students develop their Design & Technology capability and technological perspectives by studying 3 distinct mini projects. Students will follow the stages of the Design Process set out in the national curriculum (design, make, evaluate and technical skill) function, materials, structures and processes as well as specialist equipment. By the end of 3 terms it should be possible for students to have produced 3 different working products.</p>	<p>Subject content: Each term students will have their technological capability assessed through Design, Make and Evaluate tasks as well as increasing their in-depth Technical Knowledge</p>
<p>Autumn 1: <u>Design and Making</u> <u>Pewter Casting Project – Roman Inspired Jewellery</u> Students follow the design process to design and make a fully functioning 3D product (pendant) that combines different materials (pewter and acrylic). Students fully evaluate their research ideas and 3D outcomes developing technical understanding and aesthetic appreciation including modifications Strong links to History Autumn 2 ‘How Civilised were the Romans’ Links to Science year 7 Unit 6 Lesson 3 ‘Metals’</p> <p>Autumn 2: <u>Design and Making</u> <u>Pewter Casting Project – Roman Inspired Jewellery</u> Students follow the design process to design and make a fully functioning 3D product that combines different materials. Students fully evaluate their research ideas and 3D outcomes developing technical understanding and aesthetic appreciation including modifications Strong links to History Autumn 2 ‘How Civilised were the Romans’ Links to Science year 7 Unit 6 Lesson 3 ‘Metals’</p> <p>Spring 1: <u>Design, Make and Evaluate</u> <u>Graphics & Electronics - Shop Front</u> Students design and make a graphic product (signage, structure making and electronics). Students develop their technical drawing skills and design their own shop front design showing understanding of safe working practice, choice of graphic tools and manufacturing techniques. Technical knowledge of working with card, plastic, electrics, and wood.</p>	<p><u>Design and Making</u> N.C. reference DTa1, DTa2, DTscD1, DTscD2, DTscD3, DTscD4, DTscM1, DTscT1</p> <p><u>Design and Making</u> N.C. reference DTa1, DTa2, DTscD1, DTscD2, DTscD3, DTscD4, DTscM1, , DTscT1</p> <p><u>Design, Make and Evaluate</u> N.C. reference DTa1, DTa2, DTscD5, DscM1, DTscM2, DTscE3, DTscT1,</p>

Strong links with Science – Year 7 Unit 7 Energy Transfers (electrical energy and power)
Links with food technology – advertising food and required information year 7.

Spring 2:

Design, Make and Evaluate

Graphics & Electronics - Shop Front

Students design and make a graphic product (signage, structure making and electronics). Students develop their technical drawing skills and design their own shop front design showing understanding of safe working practice, choice of graphic tools and manufacturing techniques. Technical knowledge of working with card, plastic, electrics, and wood.

Strong links with Science – Year 7 Unit 7 Energy Transfers (electrical energy and power)
Links with food technology – advertising food and required information year 7.

Summer 1:

Design Make and Evaluate

Electronics - Mini Torch Light Project

Students develop their designing skills through the study of torches. Students design and make their own mini-torch based on their knowledge of circuits, forces, usability and design. Students fully evaluate.

Links to Science - Year 7 Unit 7 Energy Transfers (light and electricity)

Summer 2:

Design Make and Evaluate

Electronics - Mini Torch Light Project

Students develop their designing skills through the study of torches. Students design and make their own mini-torch based on their knowledge of circuits, forces, usability and design. Students fully evaluate.

Links to Science - Year 7 Unit 7 Energy Transfers (light and electricity)

Design, Make and Evaluate

N.C. reference

DTa1, DTa2, DTscD5, DscM1, DTscM2, DTscE3, DTscT1,

Design Make and Evaluate

N.C. reference

DTa1, DTa2, DTscD1, DTscD2, DTscD3, DTscD4, DTscD5, DTscM1, DTscM2, DTscE3, DTscT1, DTscE2 DTscE3, DTscE4

Design Make and Evaluate

N.C. reference

DTa1, DTa2, DTscD1, DTscD2, DTscD3, DTscD4, DTscD5, DTscM1, DTscM2, DTscE3, DTscT1, DTscE2 DTscE3, DTscE4

Key assessment points

- Students will be assessed at the end of each design and make task
- Students will complete a workbook to support the learning and to chronicle the knowledge and skills built through each unit of work completed
- Specific questioning linked to Maths and Science through each project undertaken
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Christian ethos

Design and technology creates moral dilemmas on a range of levels. The Christian ethos of the school will be incorporated into the delivery of the scheme of work and referenced at key points where decisions need to be made on such areas as choice of materials, reasons for choice and implications for use of and provenance of chosen materials. The bigger questions of the design process and its implications on all levels of society will be reinforced through explicit referencing to the schools' Christian ethos in the day to day delivery of the Design and Technology curriculum

Within all lessons teachers will model the importance of kindness, honesty, forgiveness and the importance of treating each other how we wish to be treated in all we do in order to ensure students actively develop these important behaviours. Students will also be regularly reminded to be polite, respectful and show good manners to everyone they meet. Students will also be taught to understand and respect other points of view, especially important when expressing opinions and evaluating Design & Technology ideas, processes and outcomes.

British values

British values are regularly promoted through high quality teaching of Design & Technology and by a positive behaviour policy which allows students to develop and demonstrate skills and attributes that will allow them to contribute in a positive manner in Modern Britain. These values and attitudes are promoted and reinforced by all staff and used to provide a model of behaviour for all our students.