

Curriculum Progression – Design and Technology

Key Stage 3 introduces pupils to designing and making for a specific purpose. Pupils develop their knowledge of a wide range of materials, components manufacturing processes in order to create meaningful products. They are introduced to the design process and develop their technical knowledge, for example in Year 7 they learn about how electricity is generated and the advantages and disadvantages of different ways of generating electricity, this relates to their product as it is electrical and also broadens their understanding of environmental issues. Pupils also develop their knowledge of mechanical systems by making a note holder from mixed materials, using tools and equipment that make use of the mechanical systems they have studied, as well as collaboratively designing and building a structure when investigating structural elements. In Year 8, pupils explore the Art Deco movement as it has a distinctive aesthetic that lends itself well to jewellery, they design and make a pewter cast item of jewellery whilst learning about metals and the casting process. They then go on to design and manufacture an organiser for a specific user, this could be a teenager, an elderly person, a dog lover etc., encouraging them to conduct primary research and to use a wider range of materials and employ more manufacturing processes. Year 8 pupils continue to Year 9, the focus is on exposing pupils to a wider range of materials, components and manufacturing processes, building their knowledge for future solutions, as well as developing their knowledge of existing products and the issues surrounding truly user-centred design and considering user's backgrounds and sensitivities.

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