

**Design and Technology**

**Year 7 Curriculum Explained**

Our Design and Technology curriculum intends to develop key practical skills essential in everyday life.

A Design Technology student will be able to:

1. Design and make products that solve real and relevant problems
2. Consider their own needs, wants and values and other uses needs
3. Design functional and appealing products for themselves and other users
4. Generate, develop and model ideas through talking, drawing and mock ups
5. Develop a variety of ICT skills
6. Select and use a range of tools and equipment to conduct practical tasks in a safe and sensible manner
7. Use a wide range of materials and components including Textiles and ingredients
8. Explore and evaluate a range of existing products
9. Develop links with other subjects such as Maths, Science and Art
10. Use a range of graphic techniques to develop ideas and thinking
11. Understand how key events in Design and Technology have help shape the world
12. Evaluate their own work against design criteria
13. Consider the views of others to improve their work

The curriculum teaches the fundamental ideas which are the building blocks of Design and Technology, and we sequence these in the best order so that students can see how these fundamental ideas link together.

**Links to Knowledge Organisers:**

Timbers and Boards (Resistant Materials)

XXX

Fashion and Textiles

XXX

Visual Communication (Graphics)

XXX

**Design and Technology**

In Year 7, students will rotate round the four areas listed below. Each rotation lasts 10 weeks and students will have specialist DT teachers for each topic. The order in which the students rotate will be dependent on which class they are in. The rotation order will be different for each class.

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| --- | --- | --- | --- |
| **Topic/Area** | **Practical Product** | **Key Skills** | **Why they are learning it** |
| Timbers and Boards (Resistant Materials) | Trinket Box or Storage Box | **Hardwoods/softwoods****Manmade boards****Joints (focus on comb & finger)****Adhesives****Aesthetics****Quality of finish****ICT – 2D Design****Laser cutting****Transfer printing**  | **To be able to select from and use specialist, tools, techniques, processes, equipment and machinery precisely, including computer aided manufacture** |
| Fashion and Textiles | Pencil Roll | **Threading up the sewing machine****Origins of fibres/fabrics****Sewing and manoeuvring on the sewing machine****Tie dye****Embellishment with hand stitching** | **To be able to test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users.** |
| Visual Communication (Graphics) | Lego character packaging  | **Basic drawing and rendering techniques.****How to develop ideas.****Packaging logo and symbols.****Different forms of plastics.****Vacuum forming.****Card assembly.** | **To develop and communicate design ideas using annotated sketches, detailed plans and computer based tools.** |