

Design and Technology allows students to explore their creativity using a range of materials and techniques. Students have the opportunity to design and make products that respond to a wide variety of problems within a range of contexts. Students are taught to combine their designing and making skills with knowledge and understanding in order to design and make a product. Skills are taught progressively to ensure that all children are able to learn and practice in order to develop as they move through the school. Evaluation is an integral part of the design process and allows the students to adapt and improve their product, this is a key skill which they need throughout their life. D&T allows students to apply the knowledge and skills learned in other subjects, particularly maths, science and art. Students' interests are captured through theme learning, ensuring that links are made in a cross curricular way, supporting motivation and meaning for their learning.

TLS Design Technology Curriculum

Architect/ Production Designer
Aeronautical Designer
Graphic Designer
Merchandiser
Engineer

Clock project

- Students study scales of production, industrial practices, robotics, create some design ideas, developments and enterprise.
- Using a brief, students will independently design and make a clock using various materials, tools and equipment safely.



Seating design project

- Students study other designers and their work. (BAME designers) They learn about paper & board. Then they will build a structure, prototype design and develop it. Seating is the inspiration; students create design ideas.
- Specialist technical principles; includes forces, structures and creating a structure from paper/straws. Pupils design and make their own design, testing it as a class and hear critique.



Chocolate Wrapper

- Students write their own design brief. Then draw some design ideas, that will be developed. Select a final design.
- Students will learn how to use 2D Design. Using the programme design and their wrapper. When complete make into a 3D prototype.



Automata project

- Students develop an understanding of H&S in the DT workshop, classroom expectations and core technical principles - including wood, metals and plastics & their working properties
- Core technical principles: Introduction to the project, create prototype from card of an automata. Make a more complex example from wood, using skills demonstrated in advance.

Year 9

Small Lamp

- Students learn about electronics and components used for the project. Draw some design ideas, learn H&S processes when soldering.
- Students learn how to make a small lamp, following instructions. Students will make their own and design the shade. Test the product.



Pewter casting

- Students understand the importance of H&S, tools and equipment, metals and their properties.
- Students start to make a mould from MDF, learn about the process of casting, pour Pewter and finishing techniques



Year 8

Steady hand game

- Students learn the basics of electronics, standard components, plastics and their properties.
- Students make a steady hand game, using the components, tools and equipment safely.

Pop Up card

- Students learn how mechanisms work and can make examples of paper engineered mechanisms.
- Students create design ideas, and make a pop-up card, referring to design brief and specification



Wooden box project

- Students understand the importance of H&S, classroom expectations, tools and equipment, types of wood and their properties.
- Students will understand how to use tools correctly, learn how to use equipment safely, start to make wooden box and finish it.



Year 7