



Design and Technology is fundamental to how we live our lives. From the roofs over our heads, to the phones in our pockets, to the food we eat.

Our students learn to use current technologies and consider the impact of future technological developments. They learn to respond creatively to solve problems as individuals and members of a team. They explore the relationship food has upon the environment and develop skills to cater for individuals and events.

Students respond with ideas, products and systems, challenging expectations where appropriate. They combine practical and intellectual skills with an understanding of aesthetic, technical, cultural, health, social, emotional, economic, industrial and environmental issues.

## KEY STAGE 3 DESIGN & TECHNOLOGY

### KS3

The years 7, 8 and 9 curriculum is designed to develop skills. Students will gain experience through specially designed units of work covering a variety of skills and themes across the different areas of technology.

Pupils will be taught to develop their creativity and ideas and increase proficiency in their execution. They should develop an understanding of the limitations of the design brief and the effectiveness of the final creation and evaluation.

Students will:

Be able to select appropriate research

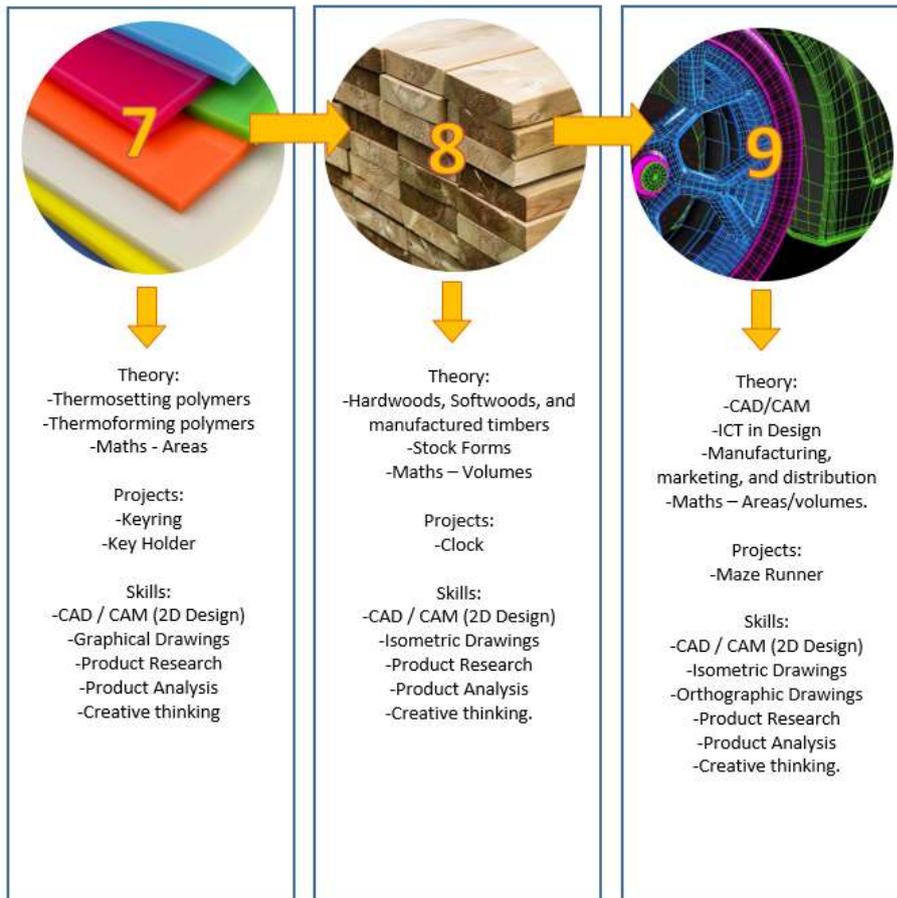
Be able to write effective, measurable design criteria

Be able to present effective design ideas for their material area

Be able to identify opportunities and constraints in their work

To select and show safe use of tools and equipment

To be able to select correct materials due to their properties



## KEY STAGE 4 DESIGN & TECHNOLOGY

### KS4

The GCSE in Design and Technology enables students to understand and apply iterative design processes through which they explore, create and evaluate a range of outcomes. The qualification enables students to use creativity and imagination to design and make prototypes (together with evidence of modelling to develop and prove product concept and function) that solve real and relevant problems, considering their own and others' needs, wants and values.

Students will learn about core technical principles, specialist technical principles, and design and making principles. In addition, students will sit the NEA, which assessed the practical application of core, specialist and designing/making principles, through the development of a portfolio of work and a final outcome.



**Component 1:**

- Core and technical principles
- Specialist technical principles
- Designing and making principles

**Projects:**

- Educational Toy

**Skills:**

- Identifying, investigating design possibilities
- Producing a design brief and specification
- Generating design ideas
- Developing design ideas
- Realising design ideas
- Analysing & evaluating.

**Component 1:**

- Core and technical principles
- Specialist technical principles
- Designing and making principles.

**Component 2:**

- Non-Exam Assessment

**Skills:**

- Identifying, investigating design possibilities
- Producing a design brief and specification
- Generating design ideas
- Developing design ideas
- Realising design ideas
- Analysing & evaluating.

## EXAMPLES OF STUDENTS' WORK





## AN ACTIVITY TO TRY AT HOME

Try this home-made conveyor belt to introduce you to some simple D&T skills!

Gather a washed and dried milk carton. Cut off the top pointy bit and two opposite sides. Poke two holes on opposite sides of the cartons and insert two pens– these will act as your rollers! Tape the ends of a long roll of paper onto each pen. Turn the pens in one direction and see your belt move!

Remember, the best product has great presentation, so think about adding graphics the outside.

