YORK HIGH SCHOOL

"You are just as likely to solve a problem by being innovative and determined – as by being brilliant."

Sir James Dyson

# DESIGN TECHNOLOGY

## KS3 SUBJECTS ON A PAGE

### OUR AIMS AND INTENTIONS

It is our intention to introduce pupils to the unique environment that Design and Technology provides, whilst equipping them with the essential digital, design and manual skills to be able to overcome the challenges of the 21st century.

### CURRICULUM KNOWLEDGE

The curriculum in Design and Technology allows students full access to the National curriculum through the study of: Materials – Timbers, Polymers, metals, modelling – Card and styrofoam, Manufacturing methods – Drilling, cutting, sanding, folding, Design – hand sketching and digital design – 2D CAD, systems and control – Mechanisms.

### SUBJECT SPECIFIC SKILLS

2D Computer aided design (CAD), Computer Numerical Control Laser cutter (CNC machining), Polymers and their manufacture, timbers and their manufacture, drilling, cutting, sanding, folding.

### IMPLEMENTATION

- The DT Programme of Study is written and regularly reviewed with subject staff.
- Regular reviewing of challenge with our KS3 curriculum.
- Lesson by lesson resources are QA'd by Subject Leader and shared on the O Drive. Recall of knowledge is supported via the interleaving of topics through starter tasks, homeworks and end of unit assessments.
- Formal feedback is given at least twice per term and identifies WWW and EBI, which is then used to extend learning during 'Chimp' (CHeck and IMProve) time.

### DT IMPLEMENTATION OF THE WIDER YHS CURRICULUM

| RESILIENCE | ASPIRATION | SUCCESS |
|---|---|---|
| ■ Quality within the planning and making stages.<br>■ Measuring and marking out accuracy<br>■ Engaging positively with assessments<br>■ Using Chimp activities to enhance learning. | ■ Aiming to improve the quality of finish time after time with incremental changes.<br>■ Aspiring to find the individual pieces that fit together in an assembly.<br>■ Regular links to future pathways that include Design and technology.<br>■ Aspiring to improve their work each time they are assessed. | ■ Understanding shop quality and its effect on pricing.<br>■ The move from craft to mass production and the use of jigs and fixtures.<br>■ An appreciation of the possible careers linked to Design and Technology that could take them around the world.<br>■ Understanding of organisations that are world class and their continuous improvement activities making them globally competitive. |

### INTENDED IMPACT

- The KS3 curriculum meets the demands of the National Curriculum.
- Pupils progress through their projects and are equipped with the skills to progress to the next project at a higher level of skill.
- Student's 'Chimp' responses demonstrate that all pupils use their assessments to advance their learning.
- Students are well prepared for further study of DT at KS4.