Design Technology Year 8

Prior Learning
You have studied Biomimicry and how we can use this to inspire our designs. You have developed knowledge of how to use a range of tools safely and develop skills in applying a range of techniques in designing, cutting, and finishing.

We will be learning about...
During this rotation, we will be learning about electronics and developing knowledge of how to construct a circuit. The project will enable students to understand how electrical systems work. They will learn how to mark, cut out and join materials using tools and machinery safely and accurately. Using this, you will advance your skills in design, combining woodwork skills for example. cutting and finishing woodwork with electronics.

Lesson	Key Learning	Homework
Lesson 1&2	- My Perfect Page – Google - Project introduction - Product analysis - Writing a design brief	Parts of a System More Complex Systems
Lesson 3&4	- CAD - Producing a design idea - How to use 2D design - ASSESMENT POINT 1 - Investigate & Design	
Lesson 5&6	- Electronics Theory INPUT - PROCESS – OUTPUT - How to solder - Soldering final circuit	Input Devices Output Devices
Lesson 7&8	- Smart and modern materials 3D Cad and 3D printing body parts	
Lesson 9&10	- Marking out material - Making product – Cutting individual pieces	Passive Components Circuit Diagrams
Lesson 11&12	- Applying finishing techniques to final product - Evaluation of final product - ASSESMENT POINT 2 - Make & Evaluate	
Lesson 13&14	- Solving a problem through design - Awe and Wonder Mechanisms and forces toy	

Key Vocabulary							
Component	CAD	LED	Acrylic	Evaluate	Electricity	Specification	CAM

Future Learning		
Year 9: Sustainability Project.	GCSE Product Design- designing your own product against a brief.	Careers: Product Designer, Architect, Software Engineer, Civil Engineer, Website Designer, Interior Designer, Games Designer and many more...

Homework guidance
Students are given homework at regular intervals at least every two weeks throughout the project. The homework tasks are shared on synergy for both parents and students to access.

How can you help?
Parents can support their child in DT by talking to them about the project they are undergoing and encouraging them to do their best. If parents take an interest in their practical project work this helps to inspire and motivate students to excel in the subject. It is also helpful if students are provided with a quiet place to do their homework tasks. Many homework tasks can be researched by using google but there are some good sites which are free to access such as: 'Technology student.com' and 'Mr D & T'.

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