



## Vision

**Transferable skills:** Students who complete the D&T KS3 programme will have a greater understanding of the world they live in and how and why products are designed the way they are. Students will understand the importance of renewable energy supplies and be more aware of climate change issues. They will have more confidence in tackling minor repairs to belongings, benefiting from knowing which tools they should use for particular problems or tasks.

**Life skills:** Students will be able to master essential skill based recipes, savoury and sweet, safely and hygienically. Students will have knowledge of healthy eating and be able to explain why this diet should be followed. They will also know how to store and cook food to avoid food poisoning.

### Carousel delivery model – order may change

	Foci	Assessment	Knowledge Organiser
Term 1	<p>1.5 volt Cell Tester (CT) - <b>Renewable energy and smart materials.</b></p> <p>Pupils will develop a basic understanding of electrical components and electricity, improving their fine hand eye coordination skills and motor skills whilst manipulating small components to make their '1.5v Cell Tester'.</p> <p>Create an electronic circuit on grey board using copper track, single strand conductor wire and Thermochromic card (SMART materials).</p> <p>The Pupils will develop and realise the importance of accurate marking out and develop soldering skills and basic production processes.</p>	<p>Pupils develop their understanding of Graphic Products and CAD/CAM making use of drawing techniques and CAD to explore design, drafting and manufacture of a CNC laser product.</p> <p>The students will be asked to reflect and evaluate on the Cell Tester and Acrylic Door plaques.</p> <p>They will complete an end of module test to confirm their understanding of key principles related to renewable energy and safe use of the laser cutter and 2D design CAD programme</p>	<p><b>Year 7 DT Safe soldering Laser cutter safety</b></p>
Term 2	<p>Project Title: <b>Introduction to carpentry</b></p> <p>Skills based making of wood joints - Students are introduced to wood and its working characteristics and properties. They use various hand skills and some machine processes learning how to construct wood joints and develop practical making skills.</p>	<p>The students will be asked to reflect on the making of their wood joints as part of their final assessment activity.</p> <p>They will complete an end of module test to confirm their understanding of basic tools and equipment.</p>	<p><b>Year 7 DT Hand tools</b></p>
Term 3	<p>Project Title: <b>Hygiene and personal safety, nutrition, food safety and seasonality</b></p> <p>Students make fresh fruit salad to practise using a knife. They reinforce knife skills, using the hob and a blender to make soup. Students practise the all-in-one method and using an oven to make cup-cakes. They use the electric mixers and piping bags to produce a professional finish on cup-cakes. Students use the grill to make pizza toasts. Lastly, they multitask to produce a pasta bake.</p>	<p>Practical dishes, homeworks and completing an end of modular test.</p> <p>They will also complete an end of module test to show their knowledge and understanding of food hygiene and safety.</p>	<p><b>Year 7 Food Bacteria Eatwell guide Hygiene</b></p>