

## Year 7 Design and Technology

During KS3 design technology students experience a range of 'design & make' activities using both resistant materials: wood, metal and plastic and also compliant materials such as food, textiles and card. All technology projects involve analysing problems and producing design solutions. These could be either models or real products. Students use computers, graphic and CAD/CAM software to enhance their design work and manufacture high quality products.

### Methods of deepening and securing knowledge:

<b>Revisiting prior learning</b>	Practical sessions are used as opportunities to revisit prior learning. Before students embark on a piece of practical session, they are reminded of the links to the key theory covered in the course. The practical work itself allows students to apply their prior learning in real-life contexts, which helps to secure students' understanding.
<b>Spaced practice</b>	Spaced practice in DT/engineering involves students reviewing material over a long period of time. This gives their minds time to form connections between the ideas and concepts so knowledge can be built upon and easily recalled later. Independent study is used to encourage students to revise learning that has been covered so far in the course. Regular revision activities, such as low-stakes tests, are also used as spaced practice strategies.

	Theme 1	Theme 2
<b>Topic(s)</b>	<b>Who Are We? Designing &amp; CAD</b>	<b>Global Citizens Textiles apron</b>
<b>Assessment</b>	Assessed against relevant elements in the individual student tracking sheets: designing, making, evaluation, technical knowledge and cooking and nutrition across B to P criteria. Allows for some overlap to allow progression. Includes end of year assessment task.	Assessed against relevant elements in the individual student tracking sheets: designing, making, evaluation, technical knowledge and cooking and nutrition across B to P criteria. Allows for some overlap to allow progression. Includes end of year assessment task.
<b>CEIAG</b> <i>(Careers that are linked to that topic)</i>	Use of professional CAD packages and links to use in various industries.	Comparison of work in class to that in industry - sweatshops and third world manufacture.

	Theme 3	Theme 4
Topic(s)	<b>Who Has The Power? Wooden toy vehicle</b>	<b>Festivals chocolate box</b>
Assessment	Assessed against relevant elements in the individual student tracking sheets: designing, making, evaluation, technical knowledge and cooking and nutrition across B to P criteria. Allows for some overlap to allow progression. Includes end of year assessment task.	Assessed against relevant elements in the individual student tracking sheets: designing, making, evaluation, technical knowledge and cooking and nutrition across B to P criteria. Allows for some overlap to allow progression. Includes end of year assessment task.
CEIAG <i>(Careers that are linked to that topic)</i>	Linking to wooden toy design and existing products sold in shops.	Pulling together packaging designers' responsibilities for everyday products.

#### Independent Study

Students in Year 7 have access to the course materials through Google Classroom. Independent study is accessible through this platform and is given either each week or once a fortnight. Independent study is generally used to secure prior learning through practice to develop confidence and memory.