

## Curriculum map

Subject: Design Technology

Year: 9

|                       | Three projects are completed throughout the year on a carousel so projects can be completed in any order. One project per term.                                                                                                                                                                   |                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| Unit title            | Engineering                                                                                                                                                                                                                                                                                       | Flatpack project                                                                                                                                                                                                                                                                  | Cafe menu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Key knowledge         | Researching<br>Designing<br>Making<br>Evaluating<br>Cutting materials<br>Wasting material<br>Brazing<br>Turning<br>Composite material<br>Standard Components<br>Thread Cutting<br>Forming of materials<br>Ferrous and Non-Ferrous metals<br>Alloys<br>Health and Safety in the workshop           | CAD/CAM<br>2D design/Solid Works<br>Testing and Modelling<br>Independent Learning<br>Researching.<br>Development of Ideas.<br>Communication.<br>Evaluation.                                                                                                                       | Sustainability<br>Seasonality<br>Food provenance<br>Food choices<br>Pastry<br>Rolling and shaping<br>How to tell when things are cooked<br>Standard component parts<br>Packaging and the law<br>Adapting recipes for a user group.<br>Evaluating products<br>Working as a team<br>Safety and hygiene<br>Designing a menu<br>Micro and macro nutrients<br>Vitamins and minerals<br>Energy balance<br>Teenage nutrition requirements<br>Presenting dishes and garnishes<br>Working as a team to finish on time |
| Key skills / concepts | Students will be able to<br>Design and develop a solution to a given problem.<br>Work safely in the workshop<br>Use tools and equipment in an appropriate manner.<br>Cut and shape materials<br>Assemble finished product.<br>Use various drawing techniques to explain and evaluate their ideas. | Students will be able to<br>Follow the design process.<br>Develop designs through modelling.<br>independently make use of Plotter Cutter and Laser Cutter.<br>Transfer CAD to CAM<br>Use a scanner to upload work and develop electronic portfolio.<br>Produce a quality product. | Students will be able to:<br>Cook a variety of dishes safely and hygienically:<br>spinach and cheese samosas, meatballs/falafels, parmesan crisps, chickpea curry bread bowls, tortillas, strawberry cheesecake, chocolate leaves, swiss roll, sausage/fruit plait, rough puff pastry, chicken fajitas, cheese and onion potato rosti with coleslaw. Final 2 course menu, made to a brief and presented.<br>Work confidently in their kitchen area leaving it clean and tidy at the end.                     |

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|                               | Project Manage and Problem solve independently throughout the project.                                                                                                                                         |                                                                                                                                                                                                                | Be able to choose and name the kitchen equipment they need.<br>Be able to light the oven.<br>Use the appropriate cooking techniques successfully for the different dishes.<br>Know what the ingredients are for in their dishes.<br>Know the eatwell guide groups and how this relates to their own everyday diet to make a healthy lifestyle. |
| Key assessment                | Students will be assessed verbally throughout the practical lessons.<br>As sections are completed the project is assessed against the project criteria. Making use of the DIRT process to enhance performance. | Students will be assessed verbally throughout the practical lessons.<br>As sections are completed the project is assessed against the project criteria. Making use of the DIRT process to enhance performance. | Each dish made will be assessed and given a WWW and AP.<br>Book work will be graded for ideas and evaluation.                                                                                                                                                                                                                                  |
| Key learning journey question | What is a composite material?<br>What is an alloy?<br>What is the difference between Ferrous and Non-Ferrous metals?                                                                                           | How can I use the plotter cutter to develop my design ideas?<br>How can I use CAD/CAM to produce a quality product?                                                                                            | What can I cook independently at home now?                                                                                                                                                                                                                                                                                                     |