Subjects: Food, Textiles, Design Technology and DEC! (Design, Engineer, Construct)

| Year 7 | Food | Food | Textiles | Design and Technology | DEC Rotation |
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| Unit & length | **Basic Skills – 7 weeks** | **Healthy Eating – 7 weeks** | **Basic Skills: Design and Construction – 8 weeks** | Materials Project<br>**7 weeks** | **Eco-Cafe Project**<br>**8 weeks** |
| Curriculum outline | To understand appropriate use of equipment.<br><br>To be able to work with an awareness of food safety and hygiene.<br><br>To be able to use the oven and hob safely and effectively and develop basic knife skills.<br><br>To have a basic understanding of sensory evaluation. | To understand what a healthy balanced diet constitutes.<br><br>To understand the function and sources of the major nutrient groups.<br><br>To be aware of the dangers of a diet containing nutrients in the wrong quantities.<br><br>To have an awareness of the design process.<br><br>To continue to develop a range of practical skills. | To research, analyse and understand artists and designers to inspire own ideas and designs.<br><br>To develop Textiles practical skills through a range of techniques including the use of materials, machines and hand stitching.<br><br>To have an awareness of upcycling materials and sustainable practices.<br><br>To be able to use machines and equipment safely and effectively. To have an awareness of health and safety in the Textiles studio. | Students will learn about material categories, specific materials, origins, typical uses and their working properties. Through focussed practical tasks (FPT) students will gain knowledge on tools and equipment which sets a grounding for the subject and instils stay safe protocols. Students will build knowledge organisers which are used for revision and are revisited in later projects. Students will also learn enhancement techniques to make drawings look more realistic, building on prior drawing skills. There is also opportunities for students to enrich their learning through specially designed challenges students' can carry out at home that build upon the lessons in school. | Students will learn about the built environment, through the process of designing an Eco-Cafe. Students will learn about the different roles involved in designing and constructing a building and the importance of sustainable design. Students will also develop their drawing and CAD 'Computer Aided Design' skills. |
| Assessment/s | **Baseline assessment task**<br><br>**Practical assessment:**<br>Pitta Bread Pizza<br><br>**Theory Assessment:**<br>Methods of heat transfer investigation | **Practical Assessment:**<br>Chicken Fish or Vegetable Bake<br><br>**Theory Assessment:**<br>Sugar investigation and write up | **Practical Assessments:**<br><br>**Design Assessment:**<br>Developing inspiration from artist analysis to create own ideas and design drawings (colour, shape, pattern and line). (AO1, AO2) | **FPT (worth 50%):**<br>Polymer (acrylic)<br>Timber (Oak/Pine)<br>Metal (steel)<br><br>**Quizzes**<br>Safety Protocols / Polymers / Timbers / Metals<br><br>**Exam** | **Portfolio (worth 50%)**<br>8 weeks, 20 marks available.<br><br>**Exam (worth 50%):**<br>1 x 40 minute exam, 32 marks available.<br><br>**Quizzes/Exam Practice:** |

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| | | | **Technique Assessment:** To demonstrate confidence and skill in Textile techniques. (AO2, AO3)<br><br>**Construction Assessment:** To demonstrate understanding and competence of using machines for design and construction of a product. (AO3, AO4) | Safety & Polymers (25%)<br>Metals & Timbers (25%)<br><br>**Going Green**<br>Biopolymer / Block bot / Foil Ball | Weekly key vocabulary and practice exam questions/ quizzes.<br><br>**Going Green:**<br>Acting on feedback in portfolio & exam practice. |

| Year 8 | Food | DEC! | Food | Textiles | Food | Design Technology |
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| Unit & length | Diet and Health | DEC Award:<br>A Home for Everyone<br>6 weeks | Scientific function of ingredients | Print in Nature.<br>8 weeks | Special Diets | Nightlight<br>6 weeks |
| Curriculum outline | To identify the issues associated with obesity.<br><br>To consolidate basic nutritional knowledge including subject specific vocabulary.<br><br>To improve numeracy and data collection skills.<br><br>To be able to carry out a product profile test and make valid conclusions.<br><br>To adapt recipes.<br><br>To calculate the nutritional content of a food product.<br><br>To continue to develop practical skills. | Students will learn about the built environment, by completing the DEC Award, 'A Home for Everyone'. Students will develop necessary knowledge and skills for the different roles and stages involved in designing and constructing a building, as well as learning the importance of inclusive design. Students will also develop their drawing and CAD 'Computer Aided Design' skills. | To have an understanding of the chemical and physical structure of starch, sugar, eggs, fats and raising agents.<br><br>To understand the following technical terms gelatinisation, caramalization, dextrination, coagulation, shortening, plasticity and rancidity.<br><br>To understand how these properties can be used to make a variety of food products.<br><br>To develop practical skills. | To research, analyse and understand artists and designers to inspire own ideas and designs.<br><br>To develop Textiles practical skills by experimenting with techniques and materials to create purposeful and meaningful responses to the theme of 'Print in Nature'.<br><br>To record own ideas using design, drawing and critical analysis through evaluation and annotation.<br><br>To be able to use machines and equipment safely and effectively. To have an awareness of health and safety in the Textiles studio. | To understand religious dietary requirements.<br><br>To understand the ethical and moral food choices that can be made.<br><br>To understand the different types of vegetarians.<br><br>To adapt a recipe to meet specific criteria.<br><br>To adapt a recipe to ensure it is suitable for a variety of special diets.<br><br>To know how to eat well on a limited budget.<br><br>To carry out a scientific investigation, write up the findings and draw conclusions.<br><br>To be able to adapt recipes to make them suitable for specific diets.<br><br>To understand what coeliac disease is and how it can treated.<br><br>To write up a scientific investigation and draw conclusions. | Students learn about analysing existing products, defining and reacting to design criteria. Students will learn about input, process and output components and how to solder them into working circuits, as well as troubleshooting. Students develop their knowledge of materials and processes through sublimation printing and metal and polymer forming processes -this adds to the materials knowledge gained in year 7 , and reinforces and links the new skills with science and maths. Students will increase their digital literacy of CAD using Adobe software to create a bespoke design based around the optional themes (pop art, game art, street art and little big planet). There is also opportunities for students to enrich their learning through specially designed challenges students' can carry out at home that build upon the lessons in school. |
| Assessment/s | Practical assessment:<br>Sausage Ragut | Portfolio (worth 50%)<br>6 weeks, 24 marks available. | Practical Assessment:<br>The Great Les Quennevais Bake Off (House competition) | Practical Assessments: | Practical Assessment:<br>Design and make a healthy pizza | Product Analysis<br>Analysis of existing products (25%) |

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| | **Theory Assessment:**<br>Childhood obesity extended writing task | **Exam (worth 50%):**<br>1 x 60 minute exam, 48 marks available.<br><br>**Quizzes/Exam Practice:**<br>Weekly key vocabulary and practice exam questions/ quizzes.<br><br>**Going Green:**<br>Acting on feedback in portfolio & exam practice. | **Theory Assessment:**<br>Raising agent experiment | **Design Assessment:**<br>Developing inspiration from artist analysis to create own ideas, designs and drawings (colour, shape, pattern and line). (AO1, AO2)<br><br>**Technique Assessment:** To demonstrate confidence and skill in Textile techniques. To show competence and awareness of safety when using machines/equipment. (AO2, AO3)<br><br>**Portfolio Assessment:** To demonstrate understanding and construction of a creative journey. (AO3, AO4) | **Theory Assessment:**<br>Gluten free product experiment and write up | **DMA – Nightlight**<br>Finished product (worth 50%)<br>**Quizzes**<br>IPO + soldering<br>CAD + Processes<br>**Exam** (25%)<br>Circuits & Soldering<br>CAD and Processes<br>**Going Green**<br>Coin Battery / Photomosaic / Kaleidocycles |

| Year 9 | Food | DEC! | Food | Textiles | Food | Design Technology |
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| Unit & length | **Food Safety and Hygiene** | **BIM Software Training & DEC portfolio**<br>**6 weeks** | **Food Provenance and Sustainability** | **Alternative Materials**<br>**8 weeks** | **East Meets West** | Outside the Box Project<br>**6 Weeks** |
| Curriculum outline | To understand the importance of food safety and hygiene and to apply this theory in practical situations.<br><br>To understand how bacteria reproduce and grow in food and the implications for food handlers.<br><br>To understand the need for different types of equipment and temperatures for the storage of foodstuffs.<br><br>To be able to consider food safety and hygiene when purchasing, storing, preparing, cooking and serving food.<br><br>To develop practical skills and self-reflect and evaluate on performance. Using this information to set personal targets.<br><br>To develop oracy skills through the review of homework. | Students will learn about the built environment, developing necessary knowledge and skills for the different roles and stages involved in designing and constructing a building. Students will also develop new CAD 'Computer Aided Design' skills using Bentley Systems OpenBuildings Designer software. | To identify the issues associated with food provenance.<br><br>To understand ethical issues related to food production and processing.<br><br>To have an awareness of food sustainability issues and environmental considerations.<br><br>To develop practical skills. | To understand the importance of sustainable fashion and identify alternatives to fast fashion.<br><br>To research, analyse and understand artists and designers to inspire own ideas and Textiles' techniques.<br><br>To learn a range of technical skills by experimenting with ideas, exploring appropriate and alternative materials (upcycled fabrics, reclaimed plastics).<br><br>To develop recording skills using a variety of materials, collage, and fashion illustration.<br><br>To develop critical analysis through class critiques, written evaluation, and annotation. | To develop an awareness and understanding of food around the world.<br><br>To evaluate dishes produced and reflect on individual work in a practical context. | Students gain an insight into industrial practices and production systems through a series of practical tasks developing their knowledge of templates and use of jigs with a focus on quality control. Students use CAD/CAM to produce a mould for pewter casting and this revisits earlier work with materials and finishes to link the work they began in year 7, intertwining their earlier work using enhancements techniques on their isometric, and working drawings of their final product. There is also opportunities for students to enrich their learning through specially designed challenges students' can carry out at home that build upon the lessons in school. |
| Assessment/s | **Practical Assessment:** Lasagne<br><br>**Theory Assessment:**<br>Food safety report extended writing task | **Portfolio (worth 50%)**<br>6 weeks, 28 marks available.<br><br>**Exam (worth 50%):**<br>1 x 80 minute exam, 64 marks available.<br><br>**Quizzes/Exam Practice:**<br>Weekly key vocabulary and practice exam questions/ quizzes. | **Practical Assessment:**<br>Bakewell tart<br><br>**Theory Assessment:**<br>Seven principles of food sustainability report | **Practical Assessments:**<br><br>**Technique Assessment:**<br>Developing inspiration from artist analysis to create own ideas, designs and fashion illustrations (AO1, AO2)<br><br>To demonstrate confidence and skill in Textile techniques (weaving, ruffles. To develop | **Practical Assessment:** Dish from selected country<br><br>**Theory Assessment:**<br>Fact sheet on selected country | **FPT (worth 50%):**<br>Finger joint tolerance sample<br>Plywood Box & Lid<br>Pewter Handle<br>**Quizzes**<br>Production systems<br>Quality control & Quality assurance<br>**Exam** |

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| | | **Going Green:**<br>Acting on feedback in portfolio & exam practice. | | an understanding of shape, form and texture).<br>(AO2, AO3)<br><br>To show competence and awareness of safety when using machines/equipment.<br><br>**Collaborative Assessment:**<br>To develop teamworking skills through collaborative learning, with each person having responsibility and a role in the construction of the outcomes.<br>(AO4) | | QC & QA (25%)<br>Communication of ideas (25%)<br>**Going Green**<br>Penrose triangle / 1:2 scale paper model / Soma Cube |