

CORE KNOWLEDGE

What I will know and understand by the end of Year 7.



| This year in Design and Technology, we will be learning | | | | This links to: | | Key Vocabulary: | | | | |
|---|------|--|--|----------------|--|-----------------|--|---|---|--|
| Target Grade: | AP1: | | | AP2: | | AP3: | | <p>Cooking and Nutrition</p> <p>To cook a repertoire of simple dishes plated up</p> <p>Theory</p> <ul style="list-style-type: none"> The difference between personal, food and kitchen hygiene Components of a balanced diet (the eatwell guide and Macronutrients) <p>Practical</p> <ul style="list-style-type: none"> How to operate a cooker, organising the storage of utensils and washing/drying methods in the kitchen Safe use of kitchen utensils and controlling risk in the kitchen, such as: slips and spillages How to use elements of taste, texture and smell when coming up with a sensory profile | <p>Links to GCSE technical skills: S1 – General practical skills / S2 – Knife skills / S3 – Preparing fruit and vegetables / S4 – Use of the cooker / S5 – Use of equipment</p> <p>The project promotes healthy eating and drinking habits across the whole school community. It promotes cultural awareness and tolerance through food production and testing.</p> | <ul style="list-style-type: none"> Hygiene Safety Eat well guide Nutrition <ul style="list-style-type: none"> Carbohydrates Protein Vegetables Starch Ingredients |
| | | | | | | | | <p>Resistant Materials</p> <p>The Making of an Arts and Crafts storage box from a prepared design brief</p> <ul style="list-style-type: none"> Safe use of hand tools (e.g.a tenon saw) and powered equipment, getting ready for work and controlling risk in the workshop. Research the Arts and Crafts design movement and existing designers such as Christopher Dresser and William Morris’ work. The impact of using wood as a renewable and sustainable building material. Making: How to carry out a lap joint. | <p>Links to WJEC Engineering: Unit 1,2 and 3 Science - Forces</p> | <ul style="list-style-type: none"> Awareness Precaution Hardwood Softwood Manufactured <ul style="list-style-type: none"> Natural Manmade Board Convenience Application |
| | | | | | | | | <p>Textiles</p> <p>The designing and making of a Mini Monster and Bags of Fun</p> <ul style="list-style-type: none"> Safe use of equipment e.g the sewing machine, scissors, iron, hand needles and controlling risk in the classroom Basic hand sewing skills such as running and backwards stitch Using the correct equipment and materials for the technique of Applique Designing to a prepared specification | <p>Links to AQA GCSE Art Textiles objectives 2, 3 and 4.</p> <p>Recycling</p> <p>Researching, Designing, Developing, Making and Evaluating skills.</p> | <ul style="list-style-type: none"> Safety Sewing machine Applique Hand stitch Scissors Bondaweb <ul style="list-style-type: none"> Iron Pins Research Design Evaluation |

CORE KNOWLEDGE

What I will know and understand by the end of Year 8.



| This year in Design and Technology, we will be learning | | This links to: | Key Vocabulary: | | | | |
|---|---|--|--|------|--|------|--|
| Cooking and Nutrition | <p>To cook a repertoire of intermediate dishes plated up</p> <p>Theory</p> <ul style="list-style-type: none"> • Introduction to HACCP and prevention of food poisoning • Relationship between diet and health and factors that affect food choice • Components of a balanced diet focusing on the importance of hydration and the function of nutrients in the body • Functional and chemical properties of proteins (gluten and eggs) <p>Practical</p> <ul style="list-style-type: none"> • Selecting and using appropriate kitchen equipment to produce a range of dishes such as making a roux sauce for macaroni and cheese, the use of a wok for stir fry etc • An awareness of taste, texture and smell culminating in a sensory profile | <p>Links to GCSE technical skills: S1 – General practical skills / S2 – Knife skills / S3 – Preparing fruit and vegetables / S4 – Use of the cooker / S5 – Use of equipment / S6 – Cooking methods / S7 – Prepare, combine and shape / S8 – Sauce making / S10 – Dough / S12 – Setting mixtures</p> <p>Y7 Food Safety and macronutrients. Links to Y7 the Eatwell guide and relationship between diet and health.</p> <p>The project allows you to consider the factors that affect food choice, food availability and food waste.</p> | <ul style="list-style-type: none"> • HACCP • Food poisoning • Eatwell guide • Nutrients • Hydration • Micronutrients • Carbohydrates – starch and sugar • Energy • Fibre • Gluten • Eggs • Protein | | | | |
| | <p>The making of an adjustable LED Light and the design and the making of Biomimicry jewellery piece</p> <ul style="list-style-type: none"> • Electronics and components; (LEDs, wires) • Using the correct equipment and materials for the technique of soldering • Work to a design brief • Researching Biomimicry design method • A comparison of power generation methods including fossil fuels and renewables • Making skills of cutting, shaping forming, joining, surface decoration, marking out | <p>Links to WJEC Engineering: Unit 1,2 and 3</p> <p>Science – electricity and power transfer</p> <p>Maths – handling data and using formulae</p> | <ul style="list-style-type: none"> • Limitations • Formulae • Geographical • Iterative • User centred | | | | |
| | <p>The designing and making of a Cushion Cover</p> <ul style="list-style-type: none"> • Use of the sewing machines; threading up and changing settings to suit • Experimenting with decorative techniques in the sewing room including; appliqué, tie dye, fabric paint, quilting, use of the computerised sewing machine. • Designing to a prepared specification • Planning the stages to make a cushion cover of their own design | <p>Links to AQA GCSE Art Textiles objectives 1, 2, 3 and 4.</p> <p>Recycling</p> <p>Links back to Y7 projects Mini Monster and Bags of fun designing and how to make a quality end product.</p> | <ul style="list-style-type: none"> • Safety • Applique • Tie dye • Quilting • Fabric paint • Design • Evaluate • Manufacture • Annotation | | | | |
| Target Grade: | | AP1: | | AP2: | | AP3: | |

CORE KNOWLEDGE

What I will know and understand by the end of Year 9.



| This year in Design and Technology, we will be learning | | This links to: | Key Vocabulary: |
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| Cooking and Nutrition | <p>To cook a repertoire of complex multi stage dishes plated up</p> <p>Theory</p> <ul style="list-style-type: none"> Food provenance; the source, seasonality and sustainability of ingredients linked to Consumer/Moral/Ethical Issues Dietary needs and health conditions linked to food Components of a balanced diet focusing on the importance of carbohydrates <p>Practical</p> <ul style="list-style-type: none"> Making pastry and pasta based dishes (dough making and shaping) Applying functional properties of food (coagulation, caramelisation, thickening and aeration) to complex dishes | <p>Links to GCSE technical skills: S1 – General practical skills / S2 – Knife skills / S3 – Preparing fruit and vegetables / S4 – Use of the cooker / S5 – Use of equipment / S6 – Cooking methods / S7 – Prepare, combine and shape / S8 – Sauce making / S10 – Dough / S11 – Raising agents / S12 – Setting mixtures</p> <p>Links to Y7 + Y8 - the Eatwell guide and relationship between diet and health.</p> <p>The project allows you to consider consumer issues, food and its functions.</p> | <ul style="list-style-type: none"> Nutrition Eat well guide Life Stages Special Diets Developing countries Food miles Fair trade Pastry Coagulation Denaturation Raising Agents Knife skills |
| Resistant Materials | <p>Pewter cast Art Deco inspired jewellery and user centered design</p> <ul style="list-style-type: none"> Materials and properties of Ferrous, Non Ferrous and alloy metals. Designing jewellery to a brief for an existing problem Researching the Art Deco Movement The impact of using metals to manufacture products Making a mould out of card and casting. Using metals and plastic to manufacture a product | <p>Links to WJEC Engineering: Unit 1,2 and 3</p> <p>Science – metals</p> <p>Computing – programming and logic</p> | <ul style="list-style-type: none"> Design movement Adaptations Iterative |
| Textiles | <p>Designing and making a day of the Dead inspired Product</p> <ul style="list-style-type: none"> Researching a specific theme: Mexican: Day of the Dead Experimenting with a variety of decorative techniques: reverse applique, block printing, stitch and slash, fusing plastic and tie dye Have an awareness of how smart materials can be applied in Textiles e.g. use of thermochromic paint | <p>Links to AQA GCSE Art Textiles objectives 1, 2, 3 and 4.</p> <p>Recycling</p> <p>Links back to Y7 + Y8 projects - builds on your surface decoration skills</p> | <ul style="list-style-type: none"> Day of the dead Recycling Reverse applique Tie dye Heat press Smart materials Print Techniques Design Evaluate |

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| Target Grade: | | AP1: | | AP2: | | AP3: | |
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CORE KNOWLEDGE

What I will know and understand by the end of Year 10.



| This year in Textiles, we will be learning | | This links to: | Key Vocabulary: | | | | |
|--|---|--|--|------|--|------|--|
| 1 | <p>The World Around You Project</p> <p>You will design and make a printed product. The theme of the print design will be inspired by the colourful and bold colours around you. You will learn to fuse patterns and colours together to create lively and individual print designs inspired by the world around you.</p> <p>A01 – Develop – investigations / demonstrate A02 – Refine – explore / select / experiment / techniques A03 – Record – ideas / observations A04 – Present – personal / response / visual</p> | <p>Year 7, 8 + 9 – decorative techniques</p> | <ul style="list-style-type: none"> • History • Contemporary • Abstract • Print • Patterns • Geometrics • Abstractions • Overprinting • Modern • Critical Understanding (AO1) • Refine (AO2) • Record (AO3) • Present (A04) | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | <p>Under the Sea Project</p> <p>A01 – Develop – investigations / demonstrate A02 – Refine – explore / select / experiment / techniques A03 – Record – ideas / observations A04 – Present – personal / response / visual</p> | <p>Links to recycling Links back to Y7 / 8 / 9 projects - designing and how to make a quality end product.</p> <p>Links back to Y8 + 9 samples of decorative techniques.</p> <p>Links to AQA GCSE Art Textiles assessment objectives from year 10 work – The World Around You</p> | <ul style="list-style-type: none"> • Formal Elements • Contemporary • Modern • Observation • Development • Experimentation • Presentation • Composition • Critical Understanding (AO1) • Refine (AO2) • Record (AO3) • Present (A04) | | | | |
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| Target Grade: | | AP1: | | AP2: | | AP3: | |

CORE KNOWLEDGE

What I will know and understand by the end of Year 11.



| This year in Textiles, we will be learning | | This links to: | Key Vocabulary: |
|--|--|---|---|
| 1 | <p>Completion of Portfolio Unit</p> <p>A01 – Develop – investigations / demonstrate A02 – Refine – explore / select / experiment / techniques A03 – Record – ideas / observations A04 – Present – personal / response / visual</p> | <p>Year 7, 8 + 9 – decorative techniques</p> <p>Links to AQA GCSE Art Textiles assessment objectives from year 10 work – African Print project and year 9 Day of the Dead project</p> | <ul style="list-style-type: none"> Formal Elements Critical Understanding (AO1) Contemporary Modern Observation Development Experimentation Presentation Composition Record (AO3) Refine (AO2) |
| 2 | <p>Externally set assignment</p> <ul style="list-style-type: none"> You will select a starting point from the AQA examination paper <p>A01 – Develop – investigations / demonstrate A02 – Refine – explore / select / experiment / techniques A03 – Record – ideas / observations</p> | <ul style="list-style-type: none"> Previous ideas development work and research completed for A01, 2 and 3 in years 10/11. | <ul style="list-style-type: none"> A01 Develop A02 Experiment A03 Record |
| 3 | <p>Externally set assignment</p> <p>A01 – Develop – investigations / demonstrate A02 – Refine – explore / select / experiment / techniques A03 – Record – ideas / observations A04 – Present – personal / response / visual Completing work for A04, presenting a personal response in the form of your final outcome in an official examination setting, over 10 hours set time.</p> | <ul style="list-style-type: none"> Ideas development work and research completed for A01, 2, 3 and 4. Previous understanding of materials and experimentation. Previous work based on all assessment objectives. | <ul style="list-style-type: none"> A04 Present Development Personal and meaningful Response |
| 4 | <p>Coursework completion / end of course</p> <p>Ensure that all coursework is completed and ready for final assessment.</p> | <ul style="list-style-type: none"> Previous work based on all assessment objectives | <ul style="list-style-type: none"> A01 Develop A02 Experiment A03 Record A04 Present |
| 5 | | | |
| 6 | | | |
| Target Grade: | | AP1: | |
| | | AP2: | |
| | | AP3: | |

CORE KNOWLEDGE

What I will know and understand by the end of Year 10.



| This year in Food, we will be learning | | This links to: | Key Vocabulary: |
|--|---|---|---|
| 1 | <p>Fruit and vegetable Commodity</p> <p>Nutrients / Plant parts / Food poisoning / Seasonality / Vegetable classification / Storage for fruit and veg / Enzymic browning / Preservation and processing of fruit and vegetables / Cooking methods</p> | <p>AQA GCSE skills met: S1 – General practical skills / S2 – Knife skills / S3 – Preparing fruit and vegetables / S4 – Use of the cooker / S5 – Use of equipment / S6 – Cooking methods / S7 – Prepare, combine and shape / S8 – Sauce making / S9 – Tenderise and marinate / S12 – Setting mixtures</p> <p>Links back to Y7 and Y8 projects, covering nutrients and cooking methods.</p> | <ul style="list-style-type: none"> Nutrients Cooking methods Food poisoning Seasonality Vegetable classification Enzymic browning Storage Preservation Processing Plant parts |
| 2 | <p>Bread and carbohydrates Commodity</p> <p>Cereals / Staple foods / Wheat / Milling / Coeliac diet / Food fortification / Types of grains / How flour is made / Gluten / Bread / Fermentation and yeast / Rice / Pasta / Oats / Gelatinisation / Dextrinisation / Coagulation</p> | <p>AQA GCSE skills met: S1 – General practical skills / S2 – Knife skills / S3 – Preparing fruit and vegetables / S4 – Use of the cooker / S5 – Use of equipment / S6 – Cooking methods / S7 – Prepare, combine and shape / S10 – Dough</p> <p>Links back to Y8 gluten</p> | <ul style="list-style-type: none"> Cereals Staple foods Wheat Coeliac Disease Fermentation Food fortification Gluten Milling Grains |
| 3 | <p>Food Safety Commodity</p> <p>Food poisoning / Bacteria / Food spoilage / Microorganisms / Contamination / Food related diseases / Role of the EHO / Types of hygiene / Temperatures / High risk foods</p> | <p>AQA GCSE skills met: S1 – General practical skills / S2 – Knife skills / S3 – Preparing fruit and vegetables / S4 – Use of the cooker / S5 – Use of equipment / S6 – Cooking methods / S7 – Prepare, combine and shape</p> <p>Links back to Y7,8+9 health and safety lessons. Links to Science.</p> | <ul style="list-style-type: none"> Food poisoning Bacteria Food spoilage Microorganisms Contamination Temperatures Food related diseases Hygiene High risk foods |
| 4 | <p>Nutritional needs and health Commodity</p> <p>Healthy diets / Life stages / Diet related diseases / Obesity and BMI / Allergens / Religious diets</p> | <p>AQA GCSE skills met: S1 – General practical skills / S2 – Knife skills / S3 – Preparing fruit and vegetables / S4 – Use of the cooker / S5 – Use of equipment / S6 – Cooking methods / S7 – Prepare, combine and shape / S8 – Sauce making / S12 – Setting mixtures</p> <p>Links back to Y7 when looking at fats. Links back to Y7+8 Healthy eating and Y9 Making Choices project.</p> | <ul style="list-style-type: none"> Healthy diets Life stages Diet related diseases e.g. coronary heart disease Allergens Religious diets Obesity and BMI |
| 5 | <p>NEA1 Practice task</p> <p>Plan relevant research / Write a hypothesis / Carry out relevant experiments / Write up experiments / Sensory testing / Testing methods / Write evaluations and analyse results.</p> | <p>Year 11 NEA 1 Year 9 NEA1 Raising agents investigation Science – writing a hypothesis</p> | <ul style="list-style-type: none"> Research Hypothesis Investigation Experiments Evaluation |
| 6 | <p>NEA 2 Practice task</p> <p>Plan relevant research / Demonstrate technical skills / Plan for the final menu / Make the final dishes / Analyse and evaluate</p> | <p>Year 11 NEA 2 Year 10 NEA 1 research</p> | <ul style="list-style-type: none"> Research Analysis Dovetail Evaluation |

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CORE KNOWLEDGE

What I will know and understand by the end of Year 11.



| This year in Food, we will be learning | | This links to: | Key Vocabulary: | | | | |
|--|---|--|---|-------------|--|-------------|--|
| 1 | <p>NEA1 Food Investigation task (released 1st September)</p> <p>Plan relevant research / Write a hypothesis / Carry out relevant experiments / Write up experiments / Sensory testing / Testing methods / Write evaluations and analyse results.</p> <p>This is 15% of your final GCSE grade.</p> | <p>Science – writing a hypothesis</p> <p>Links to food science</p> <p>Links to year 10 practice NEA 1</p> | <ul style="list-style-type: none"> • Research • Hypothesis • Investigation • Experiments • Evaluation | | | | |
| 2 | <p>NEA2 Food Preparation task (released 1st November)</p> <ul style="list-style-type: none"> • Plan and research • Demonstrate technical skills • Prepare dishes • Present dishes • Evaluate dishes <p>This is 35% of your final GCSE grade.</p> | <p>Links to lessons on knife cuts in Y9.</p> <p>Links back to previous practical lessons on how to present final dishes.</p> <p>Links made to NEA1 – how to carry out research.</p> <p>Links to year 10 practice NEA 2</p> | <ul style="list-style-type: none"> • Planning / research • Preparation • Cooking • Presentation of food • Application of nutrition • Evaluation | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | <p>Revision</p> <p>You will spend the last term covering any topics that have not already been covered and recapping previous learning. The core topics that you will learn about are:</p> <p>1. Food, nutrition and health / 2. Food science / 3. Food safety / 4. Food choice / 5. Food provenance.</p> <p>You will learn how the written exam is organised / how to prepare for the written exam / the command words used in written exam / the types of questions that will be asked in a written exam including: multiple choice, data response, structured question, open-ended response questions or free response questions.</p> | <p>Links made to Y7,8,9+10 theory lessons which cover the specification.</p> | <ul style="list-style-type: none"> • Food, nutrition and health. • Food science. • Food safety. • Food choice. • Food provenance | | | | |
| 6 | | | | | | | |
| Target Grade: | | AP1: | | AP2: | | AP3: | |