



Curriculum Map For Design & Technology Year 7

YEAR 7	Design & Technology 12-Week Rotation with Curriculum Repeated 3 Times a Year	
	Half Term 1	Half Term 2
Topics	<p>Understanding 2D & 3D Sketching Skills</p> <p>Understand The Project, Tools & Equipment Available And Health & Safety</p> <p>Learning How To Safely And Effectively Use Basic Tools And Equipment In The Workshop</p> <p>Learning How To Safely And Effectively Use Basic Tools And Equipment In The Workshop</p> <p>Understanding How To Turn 2D Shapes Into 3D Shapes</p> <p>Learning How To Design And Make Effectively Using Layers</p> <p>Safely and Effectively Use The Workshop to Create Their Layered Design</p> <p>Understanding The Analysis of Existing Designs and The Influence They Can Have On Your Own Work</p> <p>Understanding Perspective Drawing</p>	<p>Understanding The Importance Of Researching A Specific Target Market And Writing A Specification</p> <p>Understanding The Importance Of Producing A Range Of Designs And How To Draw To Scale To Produce A Final Presentation Drawing</p> <p>Understanding Physical Modelling And The Value Of Prototyping</p> <p>To A Final Product And The Evaluation Of The Final Outcome</p>
Substantive Knowledge – The Knowledge Taught By The Teacher	<ul style="list-style-type: none"> • Health and Safety in the Workshop • Safe Use of Tools • Correct Name for Tools and Equipment • Selection of Best Use of Tools and Equipment • Safe Working Environments • Origins of Plastics • Understanding of the Design Process • Designing for a Client • The Iterative Process 	<ul style="list-style-type: none"> • Health and Safety in the Workshop • Safe Use of Tools • Correct Name for Tools and Equipment • Selection of Best Use of Tools and Equipment • Safe Working Environments • Origins of Plastics • Understanding of the Design Process • Designing for a Client • The Iterative Process
Disciplinary Knowledge – How The	<ul style="list-style-type: none"> • Analysis of the work of others for external influences and inspiration. • Self-reflection and evaluation of research. 	<ul style="list-style-type: none"> • Analysis of the work of others for external influences and inspiration. • Self-reflection and evaluation of research.

Knowledge Will Be Developed & Applied	<ul style="list-style-type: none"> • Self-reflection and evaluation of designs. • Impact of plastic on the environment. • Use of tessellation to improve sustainability and rates of output. • Responding to client feedback to meet their needs. 	<ul style="list-style-type: none"> • Self-reflection and evaluation of designs. • Impact of plastic on the environment. • Use of tessellation to improve sustainability and rates of output. • Responding to client feedback to meet their needs.
Skills	<ul style="list-style-type: none"> • Developing 2D and 3D sketching skills. • Give students an introduction to hand and machine tools and equipment and make them aware of necessary H&S requirements. • Accuracy in measuring and marking out materials and develop accurate skills to cut out the material. • Encourage creativity. • The ability to research relevant information using primary and secondary research techniques. • Develop formal presentation style drawing techniques and understanding of how modelling ideas can help with the design process. • To introduce students to basic CAD modelling. 	<ul style="list-style-type: none"> • Correct selection of hand tools and equipment for safely and accurately manufacturing product. • Being able to critically analyse product to test for fitness for purpose and be able to suggest suitable modifications, learn entry level CAD skills.
Links To Prior Learning	<ul style="list-style-type: none"> • Use of Maths for KS2. • Use of Literacy from KS2. • Individual knowledge of nature which is the given theme. • IT skills, using computers to research and introduction to CAD. 	<ul style="list-style-type: none"> • Use of Maths for KS2. • Use of Literacy from KS2. • Individual knowledge of nature which is the given theme. • IT skills, using computers to research and introduction to CAD.
Literacy/ Numeracy	<ul style="list-style-type: none"> • Literacy: research skills, being able to develop detailed design specification which has been concluded from research. • Numeracy: accuracy of measuring and marking out. 	<ul style="list-style-type: none"> • Literacy: research skills, being able to develop detailed design specification which has been concluded from research. • Numeracy: accuracy of measuring and marking out.
Cross Curricular	<ul style="list-style-type: none"> • Sustainability of Materials • Use of Mathematical Modelling • Scale • Measuring • Ratios • English Language When Analysing and Self-Reflecting 	<ul style="list-style-type: none"> • Sustainability of Materials • Use of Mathematical Modelling • Scale • Measuring • Ratios • English Language When Analysing and Self-Reflecting
Assessment	<ul style="list-style-type: none"> • Forms quizzes testing the knowledge and retention of information from video and in class tutorials for safe use of equipment. • Booklet based test for H&S of tools & equipment. • Ongoing SIR marking of designs. 	<ul style="list-style-type: none"> • Ongoing SIR marking of designs. • Use of the working towards/as expected/above expected/exceptional grading function on Show My Homework for submitted sketches. • Practical assessment graded against criteria.

YEAR 7	FOOD 12-Week Rotation with Curriculum Repeated 3 Times a Year	
	Half Term 1	Half Term 2
Topics	Understanding Health And Safety In The Kitchen - Getting Ready For Cooking And The Introduction Of Basic Cooking Skills Looking At Different Fruits Used In Cooking And Sensory Evaluation	Food Provenance And Understanding Where Our Food Comes From Baking And Using The Oven Looking At Alternative Proteins And Vegetarians And Vegans
Substantive Knowledge – The Knowledge Taught By The Teacher	<ul style="list-style-type: none"> • Health and Safety in the Kitchen • Safe Use of Kitchen Equipment • Correct Name and Use of Equipment • Selection of Best Use of Small Kitchen Equipment • Acquiring The Correct Equipment For The Task • Following a Recipe to Achieve An Outcome • Understanding The Nutritional Value of Different Foods • Designing and Planning Recipes • Nutrition and The Eatwell Guide 	<ul style="list-style-type: none"> • Health and Safety in the Kitchen • Safe Use of Kitchen Equipment • Correct Name and Use of Equipment • Selection of Best Use of Small Kitchen Equipment • Acquiring The Correct Equipment For The Task • Following a Recipe To Achieve An Outcome • Understanding The Nutritional Value of Different Foods • Designing and Planning Recipes For a Target Group • Origins of Food Sources • Food Choice
Disciplinary Knowledge – How The Knowledge Will Be Developed & Applied	<ul style="list-style-type: none"> • Analysis of the work of others for inspiration. • Self-reflection and evaluation of skills and design. • Impact of nutritional knowledge on our health. • Responding to peer assessment and evaluation through sensory testing. 	<ul style="list-style-type: none"> • Analysis of the work of others for inspiration. • Impact of nutritional knowledge on our health. • The effect of food miles on the environment and climate change. • The effect of food packaging on the environment. • Consideration of why people choose to be vegan or vegetarian. • Responding to peer assessment and evaluation through sensory testing. • Self-reflection and evaluation of research, skills, design and research.
Skills	<ul style="list-style-type: none"> • The use of culinary terms. • How to work safely and prevent a hazard. • Washing up skills and working in a team. • Knife skills and vegetable cutting, weighing and measuring ingredients and reading a recipe. • Using a range of equipment including the cooker. • Taste testing and sensory evaluation of foods with Smoothie making using a blender. • Understanding the five food groups in the Eatwell guide and the importance of a balanced diet. 	<ul style="list-style-type: none"> • Development of skills learnt in term 1. • Learning how to research for recipes, designing dishes and writing a time plan for independent work. • Cooking and presenting dishes using garnish and evaluating for taste and appearance using sensory language and know how to suggest improvements.

	<ul style="list-style-type: none"> • Making a Healthy salad and a fruit crumble. 	
Links To Prior Learning	<ul style="list-style-type: none"> • Skills gained at KS2, cooking clubs or cooking at home. • Some students have cooked a lot and others have no experience in working in a kitchen environment. • Some students will be familiar with the Eatwell guide at KS2. 	<ul style="list-style-type: none"> • Students will continue to develop their skills in using a knife accurately and with precision. • They will use the whole of the oven safely to make a range of baked goods. • They will use their knowledge of healthy eating to create their own healthy dish for assessment.
Literacy/ Numeracy	<ul style="list-style-type: none"> • Numeracy - weighing and measuring accurately. • Literacy - subject specific terminology used in various written topics. 	<ul style="list-style-type: none"> • Numeracy - weighing and measuring accurately, application of ratio. • Literacy - subject specific terminology used in research, writing a recipe and evaluation.
Cross Curricular	<ul style="list-style-type: none"> • Healthy eating and lifestyle choices. • Science and P.E. - learning about the body and how nutrition is important to keep our bodies working. 	<ul style="list-style-type: none"> • Healthy eating and lifestyle choices. • Learning the skills for the wider world. • Science and Geography - the impact of the food industry on the environment and where our food comes from.
Assessment	<ul style="list-style-type: none"> • Interactive quiz on the Eatwell guide. • Teacher observation of practical skills. 	<ul style="list-style-type: none"> • Food assessment designing and making a healthy snack for the Ramsay Cafe suitable for a year 7 using skills learnt. Research, planning, making and evaluation. • End of term multiple choice test.

YEAR 7	TEXTILES 12-Week Rotation with Curriculum Repeated 3 Times a Year	
	Half Term 1	Half Term 2
Topics	<p>Introduction To Textiles</p> <p>Designing And Creating A Functional Bag</p>	<p>Development Of Practical Skills Involved In Cutting Out And Constructing A Drawstring Bag</p> <p>With Extension Practical Task Of Making Bunting Or Juggling Balls</p>
Substantive Knowledge – The Knowledge Taught By The Teacher	<ul style="list-style-type: none"> • Health and Safety in the Workshop • Safe Use of Tools • Correct Name for Tools and Equipment • Selection of Best Use of Tools and Equipment • Safe Working Environments • Origins of Polyester and Cotton • Understanding of the Design Process • Designing For a Client <ul style="list-style-type: none"> ○ Development of practical skills – use of the sewing machine, fabric embellishment including using Brusho and sublimation printing 	<ul style="list-style-type: none"> • Health and Safety in the Workshop • Safe Use of Tools • Correct Name for Tools and Equipment • Selection of Best Use of Tools and Equipment • Safe Working Environments • Origins of Polyester and Cotton • Understanding of the Design Process • Designing for a Client
Disciplinary Knowledge – How The Knowledge Will Be Developed & Applied	<ul style="list-style-type: none"> • Analysis of the work of others for external influences and inspiration. • Self-reflection and evaluation of research. • Self-reflection and evaluation of designs. • Impact of polyester and carbon footprint on the environment. • Product analysis of existing bags. • Fabric construction looking at knitting, non-woven and weaving with a sample of weaving being produced. • Writing a design specification. • Designing a functional bag. 	<ul style="list-style-type: none"> • Analysis of the work of others for external influences and inspiration. • Self-reflection and evaluation of research. • Self-reflection and evaluation of drawstring bag.
Skills	<ul style="list-style-type: none"> • Correct selection and safe use of equipment. • Development of skills including pinning, cutting out, tacking, use of the sewing machine and the iron. • Be able to critically evaluate other designers' work. • Develop creativity and risk taking while designing. 	<ul style="list-style-type: none"> • Correct selection and safe use of equipment. • Development of skills including pinning, cutting out, tacking, use of the sewing machine and the iron. • Being able to critically analyse product to test for fitness for purpose and be able to suggest suitable modifications.
Links To Prior Learning		<ul style="list-style-type: none"> • In the first half term students will all use the sewing machine to produce practice samples. We use the computerised machines initially to allow them to concentrate on accuracy. When confident they can progress onto the other machines where speed control is more challenging.
Literacy/ Numeracy	<ul style="list-style-type: none"> • Literacy - subject-specific terminology, research skills, being able to develop 	<ul style="list-style-type: none"> • Literacy - subject-specific terminology, research skills, being able to develop

	<p>detailed design specification which has been concluded from research.</p> <ul style="list-style-type: none"> • Numeracy: accuracy of measuring and marking out. 	<p>detailed design specification which has been concluded from research.</p> <ul style="list-style-type: none"> • Numeracy: accuracy of measuring and marking out.
Cross Curricular	<ul style="list-style-type: none"> • When looking at fabric construction and product analysis we look at sources of fibres and link this to environmental impact e.g. use of finite resources in the production of polyester and carbon footprint of school bags being produced in other countries. • Students research Gary Harvey who is a designer who uses recycling in all of his designs. 	<ul style="list-style-type: none"> • Cross-curricular – measuring, angles, parallel lines, perpendicular. • Additional classwork/homework tasks look at environmental impact of fabrics.
Assessment	<ul style="list-style-type: none"> • Assessment of focused homework tasks. • Assessment of practical product. 	<ul style="list-style-type: none"> • End of project quiz. • Assessment of final product.