

## Year 7 Overview 2023-24 – D&T Each unit is taught in a rotation 3 units contained in 6 double lessons, once a fortnight.

### Project1

### Materials Technology - Animal pencil holder

6 x 2hr lessons

Prior	Current	Future learning
<b>Lesson 1</b> - Introduction to workshop, Materials, H&S and tools and equipment.		
Life experiences of materials Some recall from MC. students Life experiences of tools used with the family. The design process if this is not the first unit. Some H&S knowledge if this is not the first unit.	An introduction to using the workshops, hand and power tools. Introduce polymer and Timber sources and material groupings Properties of Pine and Acrylic and reasons for choice. Material origins and uses finite resources. Learning the names of tools and equipment. The Design process (introduction or recap)	An understanding of how to follow the design process Yr10/11 Understanding of how to design. knowledge of how materials can be used, cut, formed etc and their limitations. Their ability to creatively use the materials with a continually developing competence.
<b>Lesson 2</b> - Introduction to oblique drawing and Rendering.		
Basic drawing skills, control of pencils and colour	Key aspects of for filling a brief Gathering useful research. Oblique drawing methods, rendering, annotation.	Continued understanding of the design process in next units and through school. Oblique drawing methods, rendering, annotation in all years
<b>Lesson 3</b> - Introduction to manufacturing aids and working with Pine.		
Use of scissors, measurement, estimation	Accurate working on manufacturing aids. Production methods using a range of tools and two materials	Yr 8 Clocks developing 3D material usage. Yr 9 independent use of the workshop. Their personal skill level and ability to work the material
<b>Lesson 4</b> – Developing production skills and quality.		
Understanding for 'quality' pride in their work	Finishing skills, quality checks and standards/quality control.	Quality control each prototype, as a consumer. Meeting wants and needs of clients.
<b>Lesson 5</b> – Working with acrylic and assembly methods.		
Putting parts together, processes, lego, models etc. Some have experienced low temp glue guns.	Assembly of the product. Using standard components Use of hot glue gun and finishing skills.	Use of standard components, yr 7 pencil case yr 8 clocks, and electronics Standard joins yr 9. GCSE NEA and exam. Life skills, repair, recycle.
<b>Lesson 6</b> - Completion, evaluation and reflection on skill development.		
Some awareness of the word in wider context	Evaluation of own learning and further skill development.	Within each project and enable to give it on work of others both peers and work of professionals.

#### Good

They have followed through the process, produced a prototype and can name the majority of the equipment and techniques they have learnt about.

#### Better

They understand the process they have been through to help them produce a prototype of their best idea; it is well made showing a good degree of quality control. They can name the tools and equipment that they have used and explain what it does. They show confidence in using the equipment.

#### Excellent

Materials understanding and knowledge is very good they understand where materials come from and our need to choose and select material for certain functions. They understand the process they have been through to help them produce a prototype of their best idea; it is very well made and often complex. Quality control has been applied. They can name the tools and equipment that they have used and explain what it does. They have the confidence to use the equipment by themselves.

### Project

### Textiles – Pencil Case

6 x 2hr lessons

Prior	Current	Next lesson
<b>Lesson 1</b> - Introduction to workspace, H&S and tools and equipment.		
Possibly some basic understanding of textile equipment from KS2 i.e. needle and thread.	H&S safety in a textiles room and working safely. Tools and equipment How to set up a sewing machine correctly and safely	Year 9 - recall knowledge of working in a Textiles room including tools and equipment, setting up of a sewing machine
<b>Lesson 2</b> - Introduction to using the sewing machine, threading up.		
Setting up a sewing machine. Recall tools and equipment. H&S	Function of parts on a sewing machine. How to set up and use a sewing machine using basic shapes to follow. Threading up the sewing machine (top and bobbin). Sew with thread in a straight line.	Year 9 – Threading up a sewing machine. Accuracy and control when creating samples. Independent use of tools and equipment.
<b>Lesson 3</b> - Introduce design brief and specification. Create a design idea.		
Possible some basic understanding of a design criteria from KS2	Introduce what is a design brief and specification to create a repeat pattern design idea using ICT skills (publisher). Look at how designers have produced repeats patterns. Look at repeat pattern designs in different cultures. Use of a heat press to transfer to fabric. Understanding different types of production and what we are using for prototype.	Year 9 – More emphasis on design process – create own design brief and iterative design. Encourage independent use of tools and equipment.
<b>Lesson 4</b> – Creating basic construction and decorative techniques.		
Possible use of pattern pieces at KS2 Setting up a sewing machine and threading up. Functions of a sewing machine. Use of tools and equipment. H&S.	Use manufacturing aids and using fabric scissors for the first time. Choosing a variety of decorative stitches on prototype to enhance design further. Understanding the function of an overlocker to create sample and overlock pencil case. Reflection on learning through diary of making.	Progress towards a more complex prototype - develop more complex construction and decorative techniques, encourage independent use of tools and equipment.
<b>Lesson 5</b> – Developing construction techniques - insert fastening.		
Setting up a sewing machine and threading up. Functions of a sewing machine. Use of tools and equipment. H&S. Use of an overlocker.	Continue using the overlocker. Inserting a fastening (zip). New skill of how to pin zip to fabric. Understanding what is a standard component. Reflection on learning through diary of making.	Year 9 – independent use of the overlocker. Use of sewing machine to produce new type of fastening, better understanding of standard components.
<b>Lesson 6</b> – Continual development of construction techniques – plain seam.		
Evaluation. Use of pins for construction technique. Setting up a sewing machine and threading up. Functions of a sewing machine. Use of tools and equipment. H&S.	Use basic construction technique plain seam, to complete assembly of final prototype. Reflection on learning through diary of making. Evaluation of final prototype.	Year 9 – More detailed and developed evaluation and analysis of final prototype. Follow GCSE specification to develop design process, construction and decorative techniques ready for GCSE.

#### Good

Understand H&S in a workshop, produce a specification from a design brief and can name majority of tools and equipment. Basic ICT skills to produce a simple repeat pattern for prototype. Can name fabric products used at home. Some quality control is applied when manufacturing prototype.

#### Better

Deeper understanding of design process, why we need to use a brief and specification. Understand functions of parts on a sewing machine and thread up with some assistance. Use ICT skills to create a more complex repeat pattern for design idea. Largely be able to use tools and equipment independently with some confidence and name them all. Understand different volumes of production and manufacturing aids. Quality control is applied to the manufacture of the prototype.

	<p><b>Excellent</b></p> <p>Confident in naming all tools and equipment including the naming of parts and functions on the sewing machine. Be able to thread up the sewing machine independently. A more complex design idea is made using a wider range of ICT skills. Quality control is applied throughout the manufacturing process. Use manufacturing aids with accuracy. Deeper understanding volumes of production, able to give examples and explain the level used to manufacture pencil cases.</p>		
Project	<b>Food Preparation and Nutrition – Hygiene and Safety, Equipment and Basic Skills Unit.</b>		
6 x 2hr lessons	Prior	Current	Links to future tasks
	<b>Lesson 1 - Introduction to safe working practices in the Food room.</b>		
	Possible small amount of baking at KS2 (domestic based kitchen if any) Life experiences – dependant on home circumstances and knowledge – usually baking if any.	Correct terminology of equipment and processes. Introduction to basic skills – peeling, use of digital scales. Complete potato peeling investigation - first investigation task (GCSE link).	Recall of equipment and its uses, weighing and measuring in year 8-11. Investigation Tasks for GCSE.
	<b>Lesson 2 - Fruit Salad Practical</b>		
	Peeling. Basic use of the room.	Use of room for first time, chopping using bridge hold and claw grip, slicing and dicing, washing fruit, enzymic browning.	Five a day and the Eatwell guide – GCSE and life knowledge. Preparation skills used throughout year 7-11. Enzymic browning (GCSE).
	<b>Lesson 3 - Introduction to the “Eatwell Guide”</b>		
	Possible small amount discussed at KS2 – can be outdated using the “Food pyramid” or “Eatwell plate”. Often conflicting view with what is eaten at home.	Introduce the Eatwell guide – health experts and the government recommendations for eating a balanced diet. Emphasis on not good and bad foods but foods we should be eating more of than others.	GCSE and life knowledge. Governments “Balance of Good Health” regulations.
	<b>Lesson 4 - Oat Crunchies Practical</b>		
	Healthy eating guidelines. Health and safety in the practical room. How to work with a partner during practical. Use of digital scales.	Accurate measuring. Rubbing in method. Adding liquids to form a dough. Use of oven.	Use of rubbing in method for different doughs in year 8-11 including pastry and scones. Building on types of equipment used.
	<b>Lesson 5 - Apple crumble Practical</b>		
	Peeling. Chopping. Rubbing in method. Use of oven. Enzymic browning. Bridge and claw grip.	Recall: Use a corer and peeler safely, use the bridge and claw grip to cut uniform pieces. Use the rubbing in method to make the topping correctly and judge if the crumble is cooked correctly.	Use of the practical room. Use of oven. Use of rubbing in method for different doughs in year 8-11 including pastry, bread and scones. Building on types of equipment used.
	<b>Lesson 6 – Naan bread practical</b>		
	Peeling. Chopping. Bridge and claw grip. Adding liquid to make a dough. Use of the oven.	Emphasis on kneading to give gluten stretch and a smooth dough. Forming, kneading and shaping a dough.	Yr 8 recall use of equipment and room with a promotion of independence. Progress to working with high risk foods. Continue to develop GCSE preparation skills linked with the GCSE curriculum.
<p><b>Good</b></p> <p>Be able to identify small equipment and know how to use sharp equipment safely. Use a peeler, a corer and a sharp knife safely using the claw and bridge grip. Make finished products in the time set. Know large pieces of equipment and how to use them safely, use the oven. Use the rubbing in method and mix ingredients together to make a dough. Shape a dough to make a finished product. Know what the Eatwell guide is and who it is for.</p> <p><b>Better</b></p> <p>Be able to identify small equipment and to suggest uses. Know how to use sharp equipment safely and work in a team to peel and use scales. Cut into uniform pieces, know how to prevent browning. Good quality products, made without much assistance from the teacher in the time allowed. Cut and shape a dough uniformly. Judge if the products are cooked properly.</p> <p><b>Excellent</b></p> <p>Be able to identify small equipment and be able to easily suggest uses. Know how to use sharp equipment safely and work in a team to peel and use scales. Cut fruit into uniform pieces accurately. A high quality product suitable for sale is produced and work independently in the set time.</p>			