

Westhaven School Curriculum Map for Design and Technology.

Valued – Inspired – Prepared



Westhaven School is a unique learning environment with high expectations for learners who experience barriers to learning for a range of reasons. We promote a calm environment which enables everyone to learn. The golden thread that permeates our curriculum and our conduct through every school day are the core values which shape our learners to be:

- safely independent
- confident communicators
- respectful citizens
- resilient learners
- inquisitive thinkers

The Westhaven Way is our ethos and it underpins our daily approach to behaviour and learning.

At Westhaven, English is the heart of our curriculum. We are committed to raising the standards in phonics and early reading of our learners through every curriculum subject.

At Westhaven, we follow the approach to phonics teaching as outlined in the DfE validated programme UNLOCKING LETTERS AND SOUNDS.

		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
KS1 cycle A OX		Structures <i>(building and strengthening and movement)</i>	Food Rotation 1	Skills and stories <i>(Fine motor skills and introductions to materials)</i>	Food Rotation 2	Tools and Equipment <i>(Health and Safety and basic tool based skills/hand eye coordination)</i>	Food Rotation 3
Materials and equipment		Building blocks, lego, clay, craft materials and popsicle sticks, relevant tools and tools/material cards.		Selection of story books: Fox in a box, Fidget and Quilly go fast, Best Nest, Lazer cut tricycles, how to draw birds template, Plastic eggs and general craft supplies.		PPE/Safety gear, safety cards/laminates. Plastic tools/ Nuts, bolts and screws boards.	
Skills	Revisited	<ul style="list-style-type: none"> • Use of 'play' based building and modelling e.g blocks and clay. • Sensory analysis of materials. • Use of 'craft' tools. 		<ul style="list-style-type: none"> • Drawing/tracing skills. • Cutting/glueing and sticking. • Adding colour. 		<ul style="list-style-type: none"> • Existing knowledge of PPE- How to be 'safe' and when/where? • Existing fine motor and hand-eye skills. • Following instructions. 	
	New learning	<ul style="list-style-type: none"> • Selection of material properties e.g strength, weight, malleability. • Introducing design for purpose through models. 		<ul style="list-style-type: none"> • Patterns and 3D object design. • Adding colour and texture using a variety of different media. 		<ul style="list-style-type: none"> • Introduce subject specific tools/similar. • Mimic movements used for specific tools. • Mimic/recreate actions used for using tools and equipment.. 	

Designers and cultures		Isambard kingdom brunel- UK- through photos of existing bridges.		Easter- UK/Christianity		N/A	
Key Vocabulary		Tall, short, wide, narrow, structure, house, building, bridge, strong, weak, wobbly, rigid.		Pattern, shape, stripe, dots, wheel, spinning, box, square, colour, bright, template, draw.		Goggles, hard hat, gloves, apron, shoes, mask, hammer, hit, make, build, cut, stick, glue, scissors, spanners, twists, saw	
NC links:		DESIGN: ★ Modelling ideas through 'mock ups' MAKE: ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. TECHNICAL KNOWLEDGE: ★ Build structures exploring strength and stability.		DESIGN: ★ Generate and communicate ideas- template use and drawing. MAKE: ★ Selecting and using a range of tools. ★ Selecting and using a range of materials.		MAKE: ★ Selecting and using a range of tools. ★ Selecting and using a range of materials.	
KS1 cycle B OX		Structures 2 <i>(building and strengthening and movement)</i>	Food Rotation 1	Skills and stories 2 <i>(Fine motor skills and introductions to materials)</i>	Food Rotation 2	Tools and Equipment 2 <i>(Health and Safety and basic tool based skills/hand eye coordination)</i>	Food Rotation 3
Materials and equipment		Building blocks, lego, clay, craft materials and popsicle sticks, relevant tools and tools/material cards.		Selection of story books: TBD General craft supplies.		PPE/Safety gear, safety cards/laminates. Plastic tools/ Nuts, bolts and screws boards, giant needles and thread, sewing equipment, tape and activities.	
Skills	Revisited	<ul style="list-style-type: none"> Use of 'play' based building and modelling e.g blocks and clay. Sensory analysis of materials. Use of 'craft' tools. 		<ul style="list-style-type: none"> Drawing/tracing skills. Cutting/glueing and sticking. Adding colour. Adding colour and texture using a variety of different media. 		<ul style="list-style-type: none"> Existing knowledge of PPE- How to be 'safe' and when/where? Existing fine motor and hand-eye skills. Following instructions. 	
	New learning	<ul style="list-style-type: none"> Selection of material properties e.g strength, weight, malleability. Introducing design for purpose through models. 		<ul style="list-style-type: none"> Exploring Movement. More complex pattern making. 		<ul style="list-style-type: none"> Introduce subject specific tools/similar. Mimic movements used for specific tools. Mimic/recreate actions used for using tools and equipment.. 	
Designers and cultures		Burj Khalifa- Dubai Tallest tower/skyscraper.		N/A		N/A	
Key Vocabulary		Bridge, strong, metal, wobbly, tall, long, base, river, broken, car, wood and clay.		Circle, square, zig zag, repeat, stencil, stamp, rotating, tracks, straight, turn, smooth, rough.		Needle, thread, paint, stencil, turn, screwdriver, tape, stick, saw, cut, mark, scratch.	
NC links		DESIGN: ★ Designing a purposeful product for others based on design criteria. ★ Modelling ideas through 'mock ups'. EVALUATE: ★ Evaluate their ideas against the criteria. TECHNICAL KNOWLEDGE: ★ Build structures exploring strength and stability. ★ Explore and use of mechanisms		MAKE: ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. EVALUATE: ★ Evaluating methods of making.		MAKE: ★ Selecting and using a range of tools. ★ Selecting and using a range of materials.	

KS2 Lower cycle A WE BA		Paper and boards <i>(Paper and card crafts- creativity and fine motor skills)</i>	Food rotation 1	Structures <i>(building and strengthening)</i>	Food rotation 2	Tools and equipment <i>(Wildlife/Nature links/Outdoor design)</i>	Food rotation 3
Materials and equipment		Paper and boards- mixture of resources including tissue paper, card, boards. Laser cut and hand cut. Scissors, glue and general craft supplies. Paper straws. Craft materials.		Range of different crafting materials, tools and equipment, scissors, pens, glue, tapes etc. Materials- paper straws, balsa wood, lollipop sticks, card and cardboard. Exemplar bridges and model valley.		PPE/Safety gear, safety cards/laminates. Plastic tools/ Nuts, bolts and screws boards. General craft supplies.	
Skills	Revisited	<ul style="list-style-type: none"> Folding and cutting materials Paper sourcing. Modelling in specific materials 		<ul style="list-style-type: none"> Fine motor skills and use of basic crafting tools and materials. Knowledge of structures around them. Structure building- strength and stability 		<ul style="list-style-type: none"> Existing knowledge of health and safety and PPE- How to be 'safe' and when/where? Existing fine motor and hand-eye skills. Following instructions. Existing knowledge of recycling. 	
	New learning	<ul style="list-style-type: none"> Different papers and board and their properties. <ul style="list-style-type: none"> Folding and scoring. Securing/fastening. 		Properties- strength, flexibility, malleability, rigidity. Structures		<ul style="list-style-type: none"> Introduce more subject specific tools/similar. E.g drill. Timbers knowledge Sustainability and being environmentally friendly/ecology. 	
Designers (Nationality)		Gaby Struder- Switzerland		Eiffel tower- Stephen Sauvestre: French Golden gate bridge-Irving Morrow-American		Yanko design- various sustainable artists and designers.	
Key Vocabulary		Paper, boards, glue, tape, fold, score, cut, tear, pulp, felt, transport, dried.		Strong, weak, tall, short, support, base, wide, narrow, flexible, rigid, straight, curved.		Mark out, measure, saw, drill, screw, nail, sandpaper, timber, recycled, reused, plastic, pollution.	
NC links		DESIGN: <ul style="list-style-type: none"> ★ Generating and communicating ideas through talking, drawing and mock ups. MAKE: <ul style="list-style-type: none"> ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. 		DESIGN: <ul style="list-style-type: none"> ★ Generating and communicating ideas through talking, drawing and mock ups. MAKE: <ul style="list-style-type: none"> ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. EVALUATE: <ul style="list-style-type: none"> ★ Evaluating methods of making. TECHNICAL KNOWLEDGE: <ul style="list-style-type: none"> ★ Build structures exploring strength and stability. 		DESIGN: <ul style="list-style-type: none"> ★ Generating and communicating ideas through talking, drawing and mock ups. MAKE: <ul style="list-style-type: none"> ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. 	
KS2 Lower cycle B WE BA		Movement <i>(Creating movement using wheels and basic levers)</i>	Food rotation 1	Toys/ Mixed materials <i>(Toys- making items appealing to an audience/group)</i>	Food rotation 2	Systems <i>(Lego Robots and similar)</i>	Food rotation 3
Materials and equipment		General crafting supplies and materials. Basic DT tool and equipment- scissors, glue, tape etc. Laser cut templates of vehicles and levers. Plastic/timber wheels and dowel.		Offcuts of timbers, dowel and other pre cut stock forms, adhesives and paints/varnishes. Marking out and cutting tools used for timbers.		Lego and other systems kits, system and programming resources, electrical components.	
Skills	Revisited	<ul style="list-style-type: none"> Health and safety existing knowledge. 		<ul style="list-style-type: none"> Health and safety, basic hand held tool 		<ul style="list-style-type: none"> Understanding of on/off and inputs and 	

		<ul style="list-style-type: none"> Understanding of what everyday items use to create movement. 		<p>use and material uses.</p> <ul style="list-style-type: none"> Audience based understanding and existing product knowledge. 		<p>outputs in the home and school environment.</p> <ul style="list-style-type: none"> Existing knowledge of electricity. 	
	New learning	<ul style="list-style-type: none"> Introduction to levers, linkages and mechanisms through play. Product disassembly - moving product. <ul style="list-style-type: none"> Load and changes to loads. 		<ul style="list-style-type: none"> Properties of timbers and origins/processing. Possibility of introducing movement using wheels and axles. Finishing techniques- wax and varnish. 		<ul style="list-style-type: none"> Circuit knowledge - flow of electricity. <ul style="list-style-type: none"> Input- process- output System orders of work Application of systems into products 	
Designers (Cultures)		Carroll Shelby- American car designer		Colours and cultures (mixed)		N/A	
Key Vocabulary		Rotary, linear, level, linkage, axle, wheel, motion, direction, aerodynamics.		Audience, target market, aesthetics, ergonomics, stock form, adhesive, felling, pulping, rolling, drying, finishing techniques, stock form.		Input, process, output, electricity, flow, control, light, motor, circuit, battery, energy, programme.	
NC links		<p>DESIGN:</p> <ul style="list-style-type: none"> ★ Use research and develop a design criteria-fit for purpose. ★ Generate, communicate and develop ideas. <p>EVALUATE:</p> <ul style="list-style-type: none"> ★ Investigate and analyse existing products. ★ Understand how key events and individuals id D&T have helped shape the world. 		<p>DESIGN:</p> <ul style="list-style-type: none"> ★ Designing a purposeful product for others based on design criteria. ★ Modelling ideas through 'mock ups' ★ Generate, communicate and develop ideas. <p>MAKE:</p> <ul style="list-style-type: none"> ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. <p>EVALUATE:</p> <ul style="list-style-type: none"> ★ Evaluate their ideas against the criteria. 		<p>MAKE:</p> <ul style="list-style-type: none"> ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. <p>TECHNICAL KNOWLEDGE:</p> <ul style="list-style-type: none"> ★ Understand and use electrical systems in their products. 	
KS2 Upper cycle A HU CH		Textiles <i>(Textiles processes, uses and origins)</i>	Food rotation 1	Timbers <i>(Timber based mini projects including block bots)</i>	Food rotation 2	Tool & Equipment skill building <i>(increasing the variety of tools and materials used- practising/developing skills in existing tools and equipment.)</i>	Food rotation 3
Materials and equipment		Felt, needles, hole punch, mallet and pole punch, thread, textile origin resources.		Timber off cuts, timber specific tools and equipment, marking out tools. Acrylic paint, paint pens, varnish.		Variety of different materials, polymers, timbers, cards and boards. Range of different tools and equipment- some specialist machines e.g vacuum former, line bender.	
	Revisited	<ul style="list-style-type: none"> Understanding of natural fibres- from nature/sourced naturally. 		<ul style="list-style-type: none"> Timber properties- some and sourcing. Health and safety knowledge from previous practical inputs. Finishing techniques-paint. 		<ul style="list-style-type: none"> Health and safety knowledge. <ul style="list-style-type: none"> Some tools use 	
	New learning	<ul style="list-style-type: none"> Natural vs synthetic fibres <ul style="list-style-type: none"> Silk & silk worms More depth of understanding of processes, uses and advantages/disadvantages of fabrics. Sewing techniques- depends on the group. 		<ul style="list-style-type: none"> In more depth- timber sourcing and processing. Using templates and developing painting skills. 		<ul style="list-style-type: none"> Marking out and measuring. <ul style="list-style-type: none"> Accuracy and detail. Building skill in varied tools- depends on the group which. 	

Designers (Nationality)		Sock creatures design company (Cornwall UK)		N/A		N/A	
Key Vocabulary		Natural, synthetic, fibre, fabric, sewing, pattern, felt, harvesting, processing, dying, fibre, fabric.		Timber, evergreen, bark, finishes, felling, transporting, needles, leaves, drilling, sawing, sanding, filing.		Polymer, Timber, Metal, Board, trisquare, steel rule, file, sand paper, coping saw, tenon saw, scroll saw, pillar drill.	
NC links		DESIGN: ★ Generate, communicate and develop ideas. MAKE: ★ Selecting and using a range of tools. ★ Selecting and using a range of materials.		DESIGN: ★ Modelling ideas through 'mock ups' MAKE: ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. EVALUATE: ★ Evaluate their ideas against the criteria.		MAKE: ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. EVALUATE: ★ Evaluating methods of making.	
KS2 Upper cycle B HU CH		Society and design <i>(Inclusion/social/moral/economical/environmental issues)</i>	Food rotation 1	Systems and control <i>(Lego robotics kits, systems kits and programming)</i>	Food rotation 2	Levers and linkages <i>(introduction to creating movement)</i>	Food rotation 3
Materials and equipment		Variety of craft based materials and subject based equipment. Natural resources and recycled components.		Lego kits, circuit kits, electronic components, meccano kits and general crafting supplies and equipment.		Paper and boards, split pins, general craft materials, equipment and tools.	
Skills	Revisited	<ul style="list-style-type: none"> Pre-existing understanding of disability, culture and nature. Knowledge of recycling from home/school. 		<ul style="list-style-type: none"> Circuit knowledge - flow of electricity. <ul style="list-style-type: none"> Input- process- output System orders of work 		<ul style="list-style-type: none"> Introduction to levers, linkages and mechanisms through play. Product disassembly - moving product. <ul style="list-style-type: none"> Load and changes to loads. 	
	New learning	<ul style="list-style-type: none"> Introduction into SMSC and the effect on designing products. <ul style="list-style-type: none"> Sustainable design. 		<ul style="list-style-type: none"> More complex systems 		<ul style="list-style-type: none"> Types of motion. <ul style="list-style-type: none"> Creating motion in products. Changing motion and load. 	
Designers (Nationality)		David Constantine motivation- UK		N/A		N/A	
Key Vocabulary		Environment, sustainability, recycle, reuse, reduce, disability, access, waste, pollution.		Electricity, circuit, input, output, energy source, battery, positive, negative, light, motor, switch.		Lever, linkage, movement, oscillating, reciprocating, pivot, rotary, linear.	
NC links		DESIGN: ★ Use research and develop a design criteria-fit for purpose. ★ Generate, communicate and develop ideas. EVALUATE: ★ Investigate and analyse existing products. ★ Understand how key events and individuals within D&T have helped shape the world.		DESIGN: ★ Modelling ideas through 'mock ups'. TECHNICAL KNOWLEDGE: ★ Understand and use electrical systems in their products.		DESIGN: ★ Generate, develop, model and communicate their ideas. EVALUATE: ★ understand how key events and individuals in design and technology have helped shape the world TECHNICAL KNOWLEDGE: ★ Understand and use mechanical systems in their products	
KS3 cycle A		H&S and Practical skills	Food rotation 1	Textile input <i>(Basic textiles inputs- project depending on group)</i>	Food rotation 2	Graphic design <i>(Graphic design input- project varies group dependent)</i>	Food rotation 3

Materials and equipment		H&S resources, examples of PPE and risk assessments. Chromebooks, a variety of different hand tools, and equipment - material depending on groups.		Variety of different tools and equipment along with a variety of materials and machines- depending on group.		General craft supplies, paper, card and board, e.gs of packaging. Templates and nets. Typography examples and font styles. Chromebooks and writing equipment. Drawing supplies.	
Skills	Revisited	<ul style="list-style-type: none"> Health and safety- PPE, workshop rules, behaviour. Cutting and glueing 		<ul style="list-style-type: none"> Glueing Fabric, threading a needle and tying knots. Movement used for sewing 		<ul style="list-style-type: none"> Paper craft Fine motor skills Colour and culture/emotion 	
	New learning	<ul style="list-style-type: none"> Workshop specific H&S Tool/machine safety Introducing a wider variety of subject specific tools and equipment. 		<ul style="list-style-type: none"> Textiles-sourcing and properties of materials/fabrics. Sewing techniques. Textile adhesives. Uses and specialist techniques. 		<ul style="list-style-type: none"> Rendering techniques Typography and font styles Advertisement and POS Packaging types Nets and templates 	
Designers (Nationality)		N/A		Tie Dye and pattern making- Asia		Sarah Graham- Sweets Variety of Typography designers.	
Key Vocabulary		Personal protective equipment, risk assessment, hazard, risk, control measure, legislation, ventilation, marking out, quality control, accuracy, tolerance.		Natural, synthetic, fibre, fabric, sewing, pattern, felt, harvesting, processing, dying, fibre, fabric.		Typography, font, style, shading, bold, italic, packaging, rendering, net, template, computer aided design, logo.	
NC links		MAKE: <ul style="list-style-type: none"> ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. EVALUATE: <ul style="list-style-type: none"> ★ Evaluating methods of making. 		MAKE: <ul style="list-style-type: none"> ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. EVALUATE: <ul style="list-style-type: none"> ★ Evaluating methods of making. 		DESIGN: <ul style="list-style-type: none"> ★ Use research and develop a design criteria-fit for purpose. ★ Generate, communicate and develop ideas. ★ Modelling ideas through 'mock ups' MAKE: <ul style="list-style-type: none"> ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. EVALUATE: <ul style="list-style-type: none"> ★ Investigate and analyse existing products. 	
KS3 cycle B		CAD CAM (Introduction of CAD CAM- Tinkercad and 2Ddesign)	Food rotation 1	Timbers (Specialism time- timber based)	Food rotation 2	SMSC (social, moral, sustainability and culture based design)	Food rotation 3
Materials and equipment		Chromebooks, 3D printer, Laser cutter, variety of materials and tools.		Variety of hard and soft woods, hand tools for timbers, machines such as pillar drill, hand drill, disk sander and hegner/scroll saw.		Variety of different tools and equipment along with a variety of materials and machines- depending on group.	
Skills	Revisited	<ul style="list-style-type: none"> Understanding of simple computer processes and use. How electronic systems and some processes operate-factories, robots etc 		<ul style="list-style-type: none"> Existing knowledge of tree- timber <ul style="list-style-type: none"> Uses of timbers Basic hand tool use for timbers. 		<ul style="list-style-type: none"> Existing knowledge of the 3R's- reduce, reuse, recycle Environmental impacts and pollution. 	
	New learning	<ul style="list-style-type: none"> CAD- using a computer to design a product. CAM- using a computer to manufacture 		<ul style="list-style-type: none"> Stock forms Properties, uses and types of timbers- more depth. 		<ul style="list-style-type: none"> Introduce SMSC concept and designers who are influenced by these factors. <ul style="list-style-type: none"> Designer studies 	

		<p>a product- laser cutter.</p> <ul style="list-style-type: none"> Advantages and disadvantages of using CAD CAM. 		<ul style="list-style-type: none"> Processing timbers- more depth. More complex methods of making with timbers- joinery. 		<ul style="list-style-type: none"> Cultures and their influence on design, trends etc. 	
Designers (Nationality)	N/A			N/A		TBD	
Key Vocabulary	Computer aided design, computer aided manufacture, 3D printing, laminating, laser cutting, systems, robotics, automated, quality control.			Hardwood, Softwood, stock form, dowel, processing, felling, planing, transporting, grain, knot.		Inclusion, society, environment, recycle, reuse, reduce, disability, access, target group, pollution, waste, culture, moral.	
NC links	<p>DESIGN:</p> <ul style="list-style-type: none"> ★ Generate, communicate and develop ideas. ★ Modelling ideas through 'mock ups' <p>MAKE:</p> <ul style="list-style-type: none"> ★ Selecting and using a range of tools. 			<p>MAKE:</p> <ul style="list-style-type: none"> ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. <p>EVALUATE:</p> <ul style="list-style-type: none"> ★ Evaluating methods of making. 		<p>DESIGN:</p> <ul style="list-style-type: none"> ★ Generate, communicate and develop ideas. ★ Modelling ideas through 'mock ups' <p>TECHNICAL KNOWLEDGE:</p> <ul style="list-style-type: none"> ★ Investigate and analyse existing products. ★ Understand how key events and individuals within D&T have helped shape the world. 	
KS3 cycle C	Communicating design ideas <i>(Effective design and modelling)</i>		Food rotation 1	Electronics and systems & control <i>(Lego robotics and systems kits)</i>	Food rotation 2	Metals and alloys <i>(specialism time- metals and alloys)</i>	Food rotation 3
Materials and equipment	Drawing equipment, rendering materials, paper, card, templates and nets. Modelling materials- ranging from card to clay. Examples.			Lego robotics kits, systems and control kits. Variety of inputs, outputs and energy sources.		Variety of metals and alloys, hand tools for metals, machines such as pillar drill, hand drill, pewter casting and hegner/scroll saw.	
Skills	Revisited	<ul style="list-style-type: none"> Materials knowledge Use of crafting tools and equipment Drawing and annotation skills. Rendering materials 		<ul style="list-style-type: none"> Circuit knowledge - flow of electricity. <ul style="list-style-type: none"> Input- process- output System orders of work More complex systems 		<ul style="list-style-type: none"> Knowledge of uses of metals and some of their properties. 	
	New learning	<ul style="list-style-type: none"> Manipulating materials- scoring, folding and attaching. <ul style="list-style-type: none"> Methods of using adhesives. Template and net uses. Specialist drawing (possibility of 3D) 		<ul style="list-style-type: none"> Soldering Larger variety of inputs and outputs. <ul style="list-style-type: none"> Using electronics in products. 		<ul style="list-style-type: none"> Metal and alloy properties and sourcing. Working with metals and the differences between that and timbers/polymers 	
Designers (Nationality)	TBD- group depending			N/A		N/A	
Key Vocabulary	Designing, modelling, mock up, scale, tolerance, quality, scoring, folding, adhesive, nets, templates, CAD, CAM, communicating.			Electricity, circuit, input, output, energy source, battery, positive, negative, light, motor, switch, thermo forming and thermoplastic.		Metal, alloy, composite, strength, casting, reinforced, melting point, mould, properties.	
NC links	<p>DESIGN:</p> <ul style="list-style-type: none"> ★ Generate, communicate and develop ideas. ★ Modelling ideas through 'mock ups'. <p>MAKE:</p> <ul style="list-style-type: none"> ★ Selecting and using a range of tools. 			<p>DESIGN:</p> <ul style="list-style-type: none"> ★ Modelling ideas through 'mock ups'. <p>TECHNICAL KNOWLEDGE:</p> <ul style="list-style-type: none"> ★ Understand and use electrical systems in their products. 		<p>MAKE:</p> <ul style="list-style-type: none"> ★ Selecting and using a range of tools. ★ Selecting and using a range of materials. <p>EVALUATE:</p> <ul style="list-style-type: none"> ★ Evaluating methods of making. 	

★ Selecting and using a range of materials

Year 10		Researching	Designing	Making	EL Health & Safety input	EL Health & safety	EL Designing
Materials and equipment		Existing products, research-chromebooks/web, magazines and books.	Pencil, fineliner, paper, card, pencil crayons, chromebooks, internet searches, card, boards, adhesives, scissors.	A wide variety of materials, tools, equipment and machinery.	Health and safety booklets, pen, pencil, ruler.	Health and safety booklets, pen, pencil, ruler.	Design booklets, Pencil, fineliner, paper, card, pencil crayons, chromebooks, internet searches, card, boards, adhesives, scissors.
Skills	Revisited	Product analysis, inspiration boards, materials research and tool and material knowledge.	Basic drawing skills, using a pencil lightly, outlining and adding colour- using coloured pencils.	Basic understanding of materials, their properties and their uses. Safe use of tools, equipment and machines to cut and shape materials. Health and safety.	Health and safety from throughout the years of materials, tools and machine use.	Health and safety from throughout the years of materials, tools and machine use.	Designing techniques used in previous SOW. Communicating design ideas effectively and working with a design brief and specification.
	New learning	ACCESSFMM -using this for analysis of products. Magpie designing and using existing ideas to improve and develop our own.	Material rendering- intro to halo outlines and using a template to improve 'readability' of designs. Labelling. How to develop a design.	Introduction to some new hand held tools and power tools. Increased opportunities to specialise and make own choices of material and processes to use.	Risk assessments and legislation.	Risk assessments and legislation.	Rendering, adding colour, halo highlighting. 3D drawing techniques and specialist drawings.
Key Vocabulary		Product analysis, aesthetics, ergonomics, function, manufacture, finish, suitability.	Rendering, halo, outline, annotation, adhesives, inspiration, ACCESSFMM	Marking out, quality control, tolerance, shaping, properties, thermoforming, thermoplastic, natural, synthetic, hardwood, softwood, manufactured boards, metals, alloys.	Health, safety, risk, hazard, COSHH, control measures, risk assessment, chemical, burn, entrapment, debris, personal protective equipment.	Health, safety, risk, hazard, COSHH, control measures, risk assessment, chemical, burn, entrapment, debris, personal protective equipment.	Product analysis, aesthetics, ergonomics, function, manufacture, finish, suitability.
Entry level links		★ Health & Safety U1 ★ Designing a product U2	★ Health & Safety U1 ★ Designing a product U2	★ Health & Safety U1. ★ Making a product. U3	★ Health & Safety U1.	★ Health & Safety U1.	★ Designing a product U2
Year 11		EL Designing	EL Making	EL Making	EL Making	DIY skills for the home	DIY skills for the home
Materials and equipment		Design booklets, Pencil, fineliner, paper, card, pencil crayons, chromebooks, internet searches, card, boards, adhesives, scissors.	Variety of materials, tools and equipment depending on the outcome aimed for.	Variety of materials, tools and equipment depending on the outcome aimed for.	Variety of materials, tools and equipment depending on the outcome aimed for.	Variety of materials, tools, equipment and machines.	Variety of materials, tools, equipment and machines.
Skills	Revisited	Designing techniques used in previous SOW. Communicating design ideas effectively and working with a design brief and specification.	Correct equipment, tool and machine use for marking out, cutting, shaping and finishing materials.	Correct equipment, tool and machine use for marking out, cutting, shaping and finishing materials.	Correct equipment, tool and machine use for marking out, cutting, shaping and finishing materials.	Some specific skills and tools use inputs depending on the required outcome needs of the individual..	Some specific skills and tools use inputs depending on the required outcome needs of the individual..
	New learning	Rendering, adding colour, halo highlighting. 3D drawing techniques and specialist drawings.	Some specific skills and tools use inputs depending on the required outcome needs of the individual..	Some specific skills and tools use inputs depending on the required outcome needs of the individual..	Some specific skills and tools use inputs depending on the required outcome needs of the individual..	Building confidence and independence with subject specific tools and researching career opportunities.	Building confidence and independence with subject specific tools and researching career opportunities.

Entry level links	★ Designing a product U2	★ Making a product. U3	★ Making a product. U3	★ Making a product. U3	Careers and skillset.	Careers and skillset.
Key Vocabulary	Product analysis, aesthetics, ergonomics, function, manufacture, finish, suitability.	Marking out, quality control, tolerance, shaping, properties, thermoforming, thermoplastic, natural, synthetic, hardwood, softwood, manufactured boards, metals, alloys.	Marking out, quality control, tolerance, shaping, properties, thermoforming, thermoplastic, natural, synthetic, hardwood, softwood, manufactured boards, metals, alloys.	Marking out, quality control, tolerance, shaping, properties, thermoforming, thermoplastic, natural, synthetic, hardwood, softwood, manufactured boards, metals, alloys.	Engineering, apprenticeship, electrical, designer, architect, graphic design, nuclear, construction, labourer,	Engineering, apprenticeship, electrical, designer, architect, graphic design, nuclear, construction, labourer,