DT Skills Progression

	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Design: Developing, planning and communicatin ideas.	Generate ideas based on their own experiences and examples	D1 Draw on their own experience to help generate ideas. D2 Identify a target group for what they intend to design and make.	D5 Generate ideas by drawing on their own and other people's experiences. D6 Identify a purpose for what they intend to design and make.	D11 Generate ideas for an item, considering its purpose and the user/s. D12 Identify a purpose and establish criteria for a successful product.	D16 Generate ideas, considering the purposes for which they are designing.	D19 Generate ideas through brainstorming and identify a purpose for their product.	D24 Develop a design specification: create own design criteria; draw upon market research; use research for user's individual needs; create innovative design; follow and refine a logical plan.
	Talk about what they have created, giving meaning to their pictures and models		D7 Develop their design ideas applying findings from their earlier research.			D20 Use results of investigations, information sources, including ICT when developing design ideas.	
		D3 Model their ideas in card and paper.	D8 Develop their design ideas through discussion, observation, drawing and modelling.	D13 Explore, develop and communicate design proposals by modelling ideas.	D17 Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail.	D21 Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail.	D25 Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways.
		D4 Suggest ideas and explain what they are going to do.	D9 Identify simple design criteria.	D14 Plan the order of their work before starting.		D22 Plan the order of their work, choosing appropriate materials, tools and techniques.	
			D10 Make simple drawings and label the parts.	D15 Make drawings with labels when designing.	D18 Make labelled drawings from different views showing specific features.	D23 Draw up a specification for their design.	D26 Communicate their ideas through detailed labelled drawings, annotated sketches – **clearly explaining how parts of a design will work**, cross-sectional

							planning and exploded diagrams and **CAD (Computer Aided Design**)
	EYFS	**Y1**	**Y2**	**Y3**	**Y4**	**Y5**	**Y6**
Make: Working with tools, equipment, materials and components to make quality products (inc-food)	Explore a range of tools and learn to use them safely e.g. scissors	M1 With help measure, mark out, cut and shape a range of materials. Use tools eg **scissors and a hole punch** safely.	M5 Begin to select tools and materials; use vocab' to name and describe them.	M11 Select tools and techniques for making their product.	M17 Select appropriate tools and techniques for making their product.	M23 Select appropriate materials, tools and techniques.	M28 Select appropriate tools, materials, components and techniques. M29 Produce list of tools, equipment, materials needed
	Explore and define ways to join materials e.g. glue sticks, PVA glue, tape	M2 Assemble, join and combine materials and components together using a variety of temporary methods e.g. glue or masking tape.	M6 Assemble, join and combine materials in order to make a product.	M12 Think about their ideas as they make progress and be willing to change things if this helps them improve their work.	M18 Join and combine materials and components accurately in temporary and permanent ways. M19 Use simple **graphical communication** techniques.		M30 Construct products using permanent joining techniques. M31 Assemble components make working models.
	Create a simple model using a range of materials and techniques	M3 Make their design using appropriate techniques.	M7 Cut, shape and **join fabric** to **make a simple garment**. Use basic **sewing** techniques.	M13 Measure, tape or pin, cut and **join fabric** with some accuracy.	M20 Measure, tape or pin, cut and **join fabric** with some accuracy. M21 Sew using a range of different **stitches, weave and knit.**	M24 Measure accurately (time, **dry ingredients, liquids).**	M32 Make modifications as they go along. M33 **Pin, sew and stitch** materials together create a product
			M8 Measure, cut and **score** with some accuracy.	M14 Measure, mark out, cut, **score** and assemble components with more accuracy.	M22 Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.	M25 Measure and mark out accurately.	
		M4 Use simple finishing techniques to improve the appearance of their product.	M9 Choose and use appropriate finishing techniques.	M15 Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.		M26 Cut and join with accuracy to ensure a good-quality finish to the product.	M34 Apply a range of finishing techniques. M35 Achieve a quality product.

			M10 Use hand tools safely and appropriately.		M16 Work safely and accurately with a range of simple tools.		M27 Use skills in using different tools and equipment safely and accurately.	M36 Use tools safely and accurately.
	EYFS	**Y1**	**Y2**		**Y3**	**Y4**	**Y5**	**Y6**
Cooking and Nutrition	Can manage their own personal hygiene and understand the importance of washing hands when working with food and eating	Begin to understand that food comes from plants and animals and can name and sort into the 5 food groups.	Understand that food can be farmed, grown or caught elsewhere.		Understand that food is grown (such as; tomatoes, wheat and potatoes), reared (such as; pigs, chickens and cattle), and caught (such as fish) in the UK, Europe and the wider world.	Build on their understanding that food is grown reared and caught in the UK, Europe and the wider world.	Understand that seasons may affect the food available.	Understand how food is processed into ingredients that can be eaten or used in cooking.
	Understand and sort foods that comes from plants and foods that don't	Use basic food handling, hygienic practices and personal hygiene.			Demonstrate hygienic food preparation and storage		Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens.	
	With support prepare simple dishes safely and hygienically	With support prepare simple dishes safely and hygienically **without a heat source.**	Prepare simple dishes safely and hygienically **without a heat source**.					
		Select and use appropriate fruit and vegetable, processes and tools.	Follow safe procedures for food safety and hygiene.					
		With support, use techniques such as; cutting, peeling and grating.	Use techniques such as; cutting, peeling and grating.		Know how to use a range of techniques such as: peeling, chopping, grating, cutting, slicing, mixing, spreading, kneading and **baking**.	Know how to use a range of techniques such as: peeling, chopping, grating, cutting, slicing, mixing, spreading, kneading and **baking**.	Know how to use a range of techniques such as: peeling, chopping, grating, cutting, slicing, mixing, spreading, kneading and **baking**.	Know how to use a range of techniques such as: peeling, chopping, grating, cutting, slicing, mixing, spreading, kneading and **baking**.
			Understand that everyone should eat at least 5 portions of fruits and vegetables everyday			Know that a recipe can be adapted by adding or substituting ingredients.		Know that different foods and drinks contain different substances - nutrients, water and fibre are needed for health.

Eat Like A Champ?		Use the basic principles of a healthy and varied diet to prepare dishes.			Understand and apply the principles of healthy and varied diet to provide energy for the body.		
		Understand where food comes from.			Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.		
		Whole school growing competition? Planting, building, harvesting and cooking. Use of planers and The Wilderness?			Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.		
	EYFS	**Y1**	**Y2**		**Y3**	**Y4**	**Y5**	**Y6**
Evaluate Evaluating processes and products	Build on their ideas adding more detail or making improvements	E1 Evaluate their products as they are developed, identifying strengths and possible changes they might make.	E4 Evaluate their products as they are developed, identifying strengths and possible changes they might make.		E7 Evaluate their product against original design criteria e.g. how well it meets its intended purpose.	E9 Evaluate their work both during and at the end of the assignment.	E12 Evaluate a product against the original design specification.	E14 Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests. Record their evaluations using drawings with labels.
	Identify what they like/dislike about their work and reflect on how they could make it better	E2 Evaluate their product by discussing how well it works in relation to the purpose.	E5 Evaluate against their design criteria.					E15 Evaluate against their original criteria and suggest ways that their product could be improved.
		E3 Evaluate their product by asking questions about what they have made and how they have gone about it.	E6 Talk about their ideas, saying what they like and dislike about them.			E10 Evaluate products and identify criteria that can be used for their own designs.	E13 Evaluate it personally and seek evaluation from others.	
					E8 Disassemble and evaluate familiar products.	E11 Evaluate their products carrying out appropriate tests.		
	EYFS	**Y1**	**Y2**		**Y3**	**Y4**	**Y5**	**Y6**
Influential design **Across KS1** children should know about great artists and designers. Understand the historical and cultural development of their products.					**Influential design** **Across KS2** children should know about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products.			
Inventors / designers / engineers / chefs /		**Yr1** Henry Ford (cars) Chris Boardman (racing bicycles) Wind Turbines			**Yr3** Types of information design Ikea and Habitat (furnishing / interior design)	**Yr4** Anish Kapoor (Orbit), Gustav Eiffel (Eiffel Tower)	**Yr5** Galileo Galilei (Thermoscope), Daniet Gabriel Farenheit (Thermometer and Fahrenheit Scale),	

manufacturers of ground-breaking products		Pop Up (moving) books **Yr2** George Stevenson (Rocket steam train)			Elon Musk (Tesla) Trevor Graham Baylis (wind up radio and torch)	Anders Celsius (Centigrade scale) **Yr6** Isaac Merrit Singer (sewing machine) Karl Benz (first motor engine) Isaac Newton (Sextant) Al Idrisi (Maps / Cartography)	
Kapow Lessons		Mechanisms: Wheels and Axles KS1 Yr1 Construct a Windmill KS1 Yr1 Moving Book – if extra lessons are needed after fruit salad KS1 Yr1 Food: Fruit and Vegetables KS1 Yr1 – adapt to fruit salad if smoothie making option is not available.	Textiles: Pouches – link to topic: Writing (chocolate bar) KS1 Y2 Making a Moving Monster KS1 Yr2 Baby Bear's Chair KS1 Yr2 Food: A Balanced Diet KS1 Yr2	Electronic Poster LKS2 Yr3 Textiles: Cushions LKS2 Yr3 Digital World: eCharm wearable tech (MicroBit) LKS2 Yr3 Eating Seasonally LKS2 Yr3	Structure: Pavilions LKS2 Yr4 Mechanical Systems: Slingshot Car LKS2 Yr4 Torches LKS2 Yr4 (Science) Adapting a Recipe: Biscuits LKS2 Yr4	Digital World: Monitoring devices (TinkerCAD) UKS2 Yr5 Structure: Bridges UKS2 Yr5 Stuffed Toy UKS2 Yr5	Mechanical Systems: Automata (cams) UKS2 Yr6 Digital World: Navigating the World UKS2 Yr6 Textiles: Waistcoats UKS2 Yr6
Technical Knowledge	**EYFS**	**Y1**	**Y2**	**Y3**	**Y4**	**Y5**	**Y6**
	Moving pictures and simple pop ups	Across KS1 pupils should know about the simple working characteristics of materials and components. About the movement of simple mechanisms such as: **levers, sliders, wheels and axles**. Know how **free standing structures** can be made stronger stiffer and more stable.		In early KS2 pupils should also know how mechanical systems such as **levers and linkages creates movements**. How simple **electrical circuits and components can be used to create functional products**. How to **program a computer to control their products**. How to **make strong, stiff shell structures**.		In KS2 pupils should also know: How mechanical systems such as **cams and pulleys or gears create movements**. How more **complex electrical circuits and components** can be used to create functional products. How **to program a computer to monitor changes in the environment** and control their products. How to **reinforce and strengthen a 3D framework**.	

See this list for a comprehensive outline of resources required for each Art & DT unit.
Art & DT Unit Resources Required 2022-23