

Year 2 and 3 DT Teaching Sequence

Textiles

Food

Mechanisms

Structures

Electrical systems

Year A								
<u>Projects on a Page unit</u>	<u>Design and evaluate - Knowledge</u>	<u>Substantiative knowledge</u>	<u>Disciplinary knowledge</u>	<u>Lesson 1</u> Place the DT lesson in the context of similar past DT learning Review the learning covered in previous lessons	<u>Lesson 2</u> Deliver a design brief, posing a relevant problem to be solved and practice techniques needed for this.	<u>Lesson 3</u> Children research existing products and possible construction materials, tools and ingredients	<u>Lesson 4</u> Children create their own designs in response to the brief and their own research	<u>Lesson 5 and 6</u> Children make the product, including making and evaluating a technical aspect first or producing and refining a prototype if appropriate
Textiles - Templates and joining (puppet for a pre-school child)	Generate realistic ideas through discussion and design criteria for	Know how simple 3D textile products are made, using a template to create two identical	Know how to join fabrics using different techniques e.g. running stitch, over stitch, glue,	To identify textile products and identify how they are made	To practice techniques used to join fabrics	To evaluate existing puppets and consider what makes them successful.	To design a puppet for a younger child. (Stay and Play)	To make a puppet using sewing and finishing techniques. To evaluate and refine my puppet

	<i>an appealing, functional product fit for purpose and specific users</i> <i>Explore a range of initial ideas, existing products, and make design decisions to develop a final product linked to user and purpose.</i> <i>Use words, annotated sketches and information as appropriate to develop and communicate ideas and plan the</i>	shapes. (Lesson 1)	stapling. (Lesson 2, 5) Be able to thread a needle (Lesson 2, 5) Create a running stitch (Lesson 2, 5). Use scissors correctly and with some accuracy to cut fabrics Use and explore different finishing techniques e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons. (Lesson 5)					
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	<i>main stages of making.</i> <i>Explain choice of materials according to functional properties and aesthetic qualities.</i>		Use simple finishing techniques suitable for the product they are creating. (Lesson 5)					
Food - Preparing fruit and vegetables (fruit smoothie for myself)	<i>Test their product against the original design criteria and with the intended user</i> <i>Evaluate the final product with reference back to the design brief and design specification, taking</i>	Know and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of The Eatwell Guide. (Lesson 1) Understand that different fruits and vegetables have different tastes,	Taste and evaluate a range of fruit and vegetables to determine the intended user's preferences (Lesson 3) Select from a range of fruit and vegetables according to their characteristic s e.g. colour, texture and taste to create a chosen	To know what fruit and vegetables can be used for and how this links to a healthy diet.	To practice hygienic fruit preparation techniques – juicing, grating, peeling, cutting.	To choose fruit for my smoothie by tasting and evaluating different fruit and vegetables.	To design a fruit smoothie.	To make a fruit smoothie To evaluate and refine my fruit smoothie.

	<i>into account the views of others when identifying Improvements.</i> <i>Record the evaluations using e.g., simple tables / graphs / charts such as star diagrams.</i>	textures etc. (Lesson 3) Explain what we need to do to be hygienic when preparing and handling food. (Lesson 2)	product (Lesson 3) Select from and use a range of tools and equipment to perform practical tasks; juicer, peeler, grater, knife, spoon, scissors (Lesson 2, 4, 5)					
Structures – shell structures (box for a story character)		Develop knowledge of how to construct strong, stiff shell structures (Lesson 1) Develop knowledge of nets of cubes and cuboids and, where	Construct strong, stiff shell structures. Use nets of cubes and cuboids when creating more complex shapes.	To know what a shell structure is and how structures can be made strong and stiff.	To practice using nets of cubes, cuboids and other 3D shapes to create structures.	To evaluate existing shell structures.	To design a shell structure.	To make, evaluate and refine a shell structure.

		appropriate, more complex 3D shapes (Lesson 2)						
Year B								
<u>Projects on a Page unit</u>	<u>Design and evaluate - Knowledge</u>	<u>Substantiative knowledge</u>	<u>Disciplinary knowledge</u>	<u>Lesson 1</u> Place the DT lesson in the context of similar past DT learning Review the learning covered in previous lessons	<u>Lesson 2</u> Deliver a design brief, posing a relevant problem to be solved	<u>Lesson 3</u> Children research existing products and possible construction materials, tools and ingredients	<u>Lesson 4</u> Children create their own designs in response to the brief and their own research	<u>Lesson 5 and 6</u> Children make the product, including making and evaluating a technical aspect first or producing and refining a prototype if appropriate
Textiles – 2D shape to 3D product (making a soft toy for a friend)	Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose	Understand the need for patterns and seam Allowances (Lesson 1)	Use scissors correctly and with accuracy to cut fabrics - measure carefully to avoid mistakes. (Lesson 2, 5) Create patterns and seam	To understand the need for patterns and seam allowances and identify these on existing soft toys.	To practice the techniques needed to sew a soft toy.	To design a soft toy for a friend.	To make, refine and evaluate a soft toy for a friend.	

	<i>and specific users</i> <i>Explore a range of initial ideas, existing products, and make design decisions to develop a final product linked to user and purpose.</i> <i>Use words, annotated sketches and information as appropriate to develop and communicate ideas and plan the main stages of making.</i> <i>Explain choice of</i>		allowances. (Lesson 2, 5) Select materials based on characteristics e.g. strength, and aesthetic qualities e.g. pattern. (Lesson 4) Know how to strengthen, stiffen and reinforce existing fabrics (Lesson 2, 5) Know how to securely join two pieces of fabric together (Lesson 2, 5) Create a cross stitch, backwards running				
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	<i>materials according to functional properties and aesthetic qualities.</i> <i>Test their product against the original design criteria and with the intended user</i> <i>Evaluate the final product with reference back to the design brief</i>		stitch and blanket stitch to join fabrics. (Lesson 2, 5) Use finishing and decorative techniques suitable for the product they are designing and making. Join these using a mixture of learned stitches and fabric glue. (Lesson 5, 6)					
Food – varied and healthy diet (making a salad for myself)	<i>and design specification, taking into account the views of others when identifying Improvements.</i>	Understand how ingredients can be fresh, pre-cooked or processed and whether they are grown,	Use appropriate equipment and utensils accurately to prepare and combine food e.g. knives,	To differentiate between fresh, pre-cooked, processed salad ingredients and identify whether they	To practice using heat sources, equipment and utensils to prepare and combine food.	To evaluate and sample seasonal ingredients from existing salad recipes.	To plan a recipe for a salad.	To make, evaluate and refine my salad.

	<i>Record the evaluations using e.g., simple tables / graphs / charts such as star diagrams.</i>	reared or caught Know the main stages of a recipe, including how ingredients are listed, utensils and equipment Know and understand about seasonality in relation to food products and the source of different food products Learn how to use heat sources safely and appropriately according to the required cooking	chopping board, weighing scales, cling film, grater, peeler Plan the main stages of a recipe, listing ingredients, utensils and equipment Select from a range of ingredients to make appropriate food products, thinking about sensory characteristics Use appropriate utensils and equipment	are grown, reared or caught.					
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		temperature needed. Know when and where fruits and vegetables are grown and learn about seasonality in the UK	accurately to measure and combine appropriate ingredients Make, decorate and present the food product appropriately for the intended user and purpose					
Mechanism - Wheels and axles (moving car for a soft toy)		Know that different mechanisms produce different types of movement. (Lesson 1) Distinguish between fixed and freely moving axles (Lesson 1)	Select from and use materials according to their characteristics (Lesson 4) Use simple finishing techniques suitable for the product they are creating (Lesson 5-6)	Revisit or introduce what a mechanism is – Y2 will have looked at sliders and levers last year. To know what wheels and axles are and how axles enable wheels to turn.	To practice making moving wheels and ensure they are able to rotate.	To identify wheels, axles and chassis on existing toy cars.	To design a moving car for a soft toy, choosing the materials I will use.	To make my moving car for a soft toy. To test, evaluate and refine my moving car.

		Know how axles enable a wheel to turn (Lesson 1)	Use a saw to cut dowel to the correct length (Lesson 2, 5) Create moving wheels using loose fitting holes with fixed wheels and tight-fitting holes with loosely-fixed wheels. (Lesson 2, 5) Select from and use a range of materials and components according to their characteristics.(Lesson 4) Problem-solve why wheels won't rotate.					
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			(Lesson 2, 5, 6)					
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