

DT PROGRESSION

YEAR 1 TO YEAR 6

Food Textiles **Moving Parts** Structures **Topics Term 1 – Aut 2 Term 2 – Spr 2 Term 3 – Sum 2** UK Countries (T) Transports(T) Animals (Sc) Year 1 Levers + Slides Moving Pictures/Cards: Easter Textiles: Christmas Baubles Food - Farm to Fork Salads. Garden + Fruit (To explore different ways of joining fabricscard cutting, gluing, stapling, threading by hand and pinning) Neil Armstrong (T) Non-European Study (Kenya) (T) World (T) Year 2 Materials (Sc) - which materials are appropriate Axels and Wheels eg Design a sand buggy Living Things (Sc) Structures - Bridges eg Tower bridge/3 pigs -Cooking - Granola bar (mars rover) straws, lolly sticks, tape, glue. Stone age to Iron age(T) Rocks (Sc)Romans (Invaders) (T) Volcanoes and Earthquakes (T) Year 3 Animals - Muscles and Skeletons (Sc) Linkages + Levers - Moving Picture Christmas Cards Forces and magnets (Sc) Food/Cooking - Bake Healthy Cakes/biscuits in Pneumatics an Oven eg Carrot cakes, Beetroot Brownies Viking & Anglo Saxons (T) Ancient Egyptian (T) Region in the UK-London (T) Year 4 Living things (Sc) Basic wooden Structure - Frames - for Animals (Sc) - Food Chains Food/Cooking - soup kitchen etc (cooked on Egyptian picture Textile/Sewing Make: Viking purse **Hob** and **Oven**) Industrial revolution to Modern day Coventry Ancient Greece (T) European country - Barcelona (T) Year 5 Autumn 2 - Earth and Space (Sc) Wood 3D structure - Greek Temple (Aut 2) Life Cycles - life cycles (Sc) 1 + 2 Materials (properties and change of Food/Cooking Mediterranean Diet - Grill/BBQ matter)(Sc) D&T Summer - Pulleys eg lifting equipment-Complete Meal – Fish based pulleys **CRIME AND PUNISHMENT (T)** N & S America - Amazon (T) Mayan Civilisation (T) Year 6 (Evolution Spring 2 and Summer 1) Animals- circulatory system (Sc) Light (Sc) D &T Electrical (Aut 2) - Design a pressure pad D & T Use a computer program to control a Application of DT skills (to include Food/cooking) - Mini Enterprise to alert when a burglar is outside a property. product - Using Lego Spark

Reception Medium Term Plan

		Technical Knowledge	Exploring and Planning	Making						
	People who help us	Τσ identify different materials e.g., card,	Explore different materials	Join different materials and explore						
ے	Celebrations		freely, to develop their ideas	different textures.						
돌		To identify different tools e.g., scissors, hole	about how to use them and							
₹ 3		punch, staple, sticky tape, masking tape,	what to make.							
Autumn		glue stick.								
		To know different ways to combine								
		materials -								
	Great outdoors		Explore, use and refine a variety	Return to and build on their previous						
Spring			of artistic effects to express their	learning, refining ideas and developing						
<u>\$</u>			ideas and feelings	their ability to represent them.						
S										
	Mega structures	End of Summer: ELG: Safely use and explo	re a variety of materials, tools and	techniques, experimenting with colour,						
Ž		design, texture, form and function.								
Summe		Share their crea	Share their creations, explaining the process they have used.							
Sm			ials when role playing characters							
			. 0 0							

Year One and Two Medium Term Plan

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		Area of DT	Evaluate products	Technical Knowledge	Explore	Design	Making	Evaluate	Equipment / Tools
Autumn	Year 1	Textiles	Say what they like and dislike about a product / design Identify if a product works or not Identify the materials a design / product is made from	Learn how to join fabric together with glue Forward stich	Use templates and models to learn key skills Follow instructions given	Brief will be given Success criteria to be given Talk about what they want to design and how they are going to design it Draw and label what the final product should look like (front only)	Follow instructions to select the correct tools and materials	Say what they like / dislike about their product	Fabric with pre-cut holes Plastic needles Silk thread Buttons Felt Glue
	Year 2	Structures	Record simple opinions towards a product / design Explain why they have an opinion on whether a product is good or bad	To make axles and wheels	Use templates and models to learn key skills Follow instructions given	Brief will be given Success criteria to be given Annotate a simple drawing making notes about materials and techniques	Use their design to choose key equipment and materials needed	State whether their product met the simple criteria	Wooden Dowel Junior hacksaw

		Area of DT	Evaluate products	Technical Knowledge	Explore	Design	Making	Evaluate	Equipment / Tools
Spring	Year 1	Levers and Sliders	Say what they like and dislike about a product / design Identify if a product works or not Identify the materials a design / product is made from	Use levers in their products Use sliders in their products	Use templates and models to learn key skills Follow instructions given	Brief will be given Success criteria to be given Talk about what they want to design and how they are going to design it Draw and label what the final product should look like (front only)	Follow instructions to select the correct tools and materials	Say what they like / dislike about their product	scissors hole punch PVA Glue Sellotape Masking tape Split pins string Pipe cleaners
	Year 2	Moving Parts	Record simple opinions towards a product / design Explain why they have an opinion on whether a product is good or bad	To make axles and wheels	Use templates and models to learn key skills Follow instructions given	Brief will be given Success criteria to be given Annotate a simple drawing making notes about materials and techniques	Use their design to choose key equipment and materials needed	State whether their product met the simple criteria	Wooden Dowel Junior hacksaw

		Area of DT	Evaluate products	Technical Knowledge	Explore	Design	Making	Evaluate	Equipment / Tools
ner	Year 1	Food	Say what they like and dislike about a product / design Identify if a product works or not Identify the materials a design / product is made from	To know why we need basic hygiene when preparing food (clean hands etc) Know where UK fruit and veg comes from Know what makes a healthy diet Slice soft fruit with a blunt knife	Use templates and models to learn key skills Follow instructions given	Brief will be given Success criteria to be given Talk about what they want to design and how they are going to design it Draw and label what the final product should look like (front only)	Follow instructions to select the correct tools and materials	Say what they like / dislike about their product	Blunt knife Chopping board Skewers
Summer	Year 2	Food	Record simple opinions towards a product / design Explain why they have an opinion on whether a product is good or bad	To know why we need basic hygiene when preparing food (tools and worktops) Know where UK food comes from – animals and plant Know what makes a varied diet Chop, grate, slice food	Trial 2-3 ideas and decide which methods are more successful (from a small selection) Follow safety instruction when using tools and transporting resources	Brief will be given Success criteria to be given Annotate a simple drawing making notes about materials and techniques	Use their design to choose key equipment and materials needed	State whether their product met the simple criteria	Box grater

Year Three and Four Medium Term Plan

		Area of DT	Evaluate products	Technical	Explore	Design	Making	Evaluate	Equipment / Tools
		Alea Ol Di	Evaluate products	Knowledge	Explore	Design	iviakilig	Evaluate	Equipment / 100is
				Kilowieuge					
Autumn	Year 3	Moving Pictures	Investigate a range of existing products identifying strengths and weaknesses	Use linkages and levers for moving parts	Evaluate if their mock ups are successful	Gather information about the needs and wants from an individual / group Generate their own criteria reflecting research Annotate front and back / side designs with information about technical choices and materials selected Describe the purpose of their products Explain how their products will work	Make annotations during the making process to reflect changes made – annotate on the plan	Evaluate their products against their own criteria Suggest ways in which to improve their product that reflects the evaluation	Low melt glue guns (take advice before use) Stapler rulers Double sided sticky tape
	Year 4	Structures	Know why certain materials have been used in a product	To join wood – butt joints To strengthen joints 2D (reinforce) To saw wood at a 45 degree angle To measure accurately To join a wide range of materials successfully	Make simple changes to their design	Consider aesthetic qualities of the design for the final user. Design to meet these needs. Explain options considered during the design process, indicating preferred choice	Make annotations during the making process to reflect changes made – annotate on the plan	Evaluate their products based on feedback from others	Low melt glue guns (take advice before use) Wood glue Stapler Saw Angle measure rulers Double sided sticky tape String Doweling Fabric

		Area of DT	Evaluate products	Technical Knowledge	Explore	Design	Making	Evaluate	Equipment / Tools
Spring	Year 3	Food	Investigate a range of existing products identifying strengths and weaknesses	Know what makes a healthy diet Use the oven to bake To cut with a sharp knife To grate hard food	Make mock ups of techniques learned making notes on where they could be used To measure accurately	Gather information about the needs and wants from an individual / group Generate their own criteria reflecting research Annotate front and back / side designs with information about technical choices and materials selected Describe the purpose of their products Explain how their products will work	Make annotations during the making process to reflect changes made – annotate on the plan	Evaluate their products against their own criteria Suggest ways in which to improve their product that reflects the evaluation	peelers Grater Oven trays Oven gloves oven Sharp knife
	Year 4	Food	Know why certain materials have been used in a product	Understand seasonality of foods in the UK Know which foods are grown Know which food is reared Use a hob and oven to cook	Evaluate if their mock ups are successful Make simple changes to their design	Consider aesthetic qualities of the design for the final user. Design to meet these needs. Explain options considered during the design process, indicating preferred choice	Make annotations during the making process to reflect changes made – annotate on the plan	Evaluate their products based on feedback from others	peelers Hob Garlic crusher Sharp knife Pan

		Area of DT	Evaluate products	Technical Knowledge	Explore	Design	Making	Evaluate	Equipment / Tools
Summer	Year 3	Pneumatics	Investigate a range of existing products identifying strengths and weaknesses		Evaluate if their mock ups are successful	Gather information about the needs and wants from an individual / group Generate their own criteria reflecting research Annotate front and back / side designs with information about technical choices and materials selected Describe the purpose of their products Explain how their products will work	Make annotations during the making process to reflect changes made – annotate on the plan	Evaluate their products against their own criteria Suggest ways in which to improve their product that reflects the evaluation	
	Year 4	Textiles	Know why certain materials have been used in a product	As above and blanket stich	Make simple changes to their design	Consider aesthetic qualities of the design for the final user. Design to meet these needs. Explain options considered during the design process, indicating preferred choice Designs show cross sections and exploded views	Make annotations during the making process to reflect changes made – annotate on the plan	Evaluate their products based on feedback from others	Needles Felt Fine thread Silks Beads Buttons Different textured fabric

Year Five and Six Medium Term Plan

		Area of DT	Evaluate products	Technical	Explore	Design	Making	Evaluate	Equipment / Tools
				Knowledge					
	Year 5	Structures	Investigate a range of existing products making comparisons between them Critically evaluate the quality of design (aesthetics and functions)	To join wood – butt joints To strengthen joints 2D (reinforce) To saw wood at a 45 degree angle To measure accurately	To explore a wide range of resources identifying the pro and cons of using the various resources trialled	Identify who they are designing for and its purpose Design products based on resources available to them. Find creative solutions when resources are limited Designs show exploded views	Make annotations during the making process to reflect changes made to overcome difficulties in functions and aesthetics	Compare their designs to designers studied. Make detailed evaluations for aesthetics and function	Crafting knife Laminator Wire Saw Hot melt (advice needed) Card Angle cutter Different sized wood Different thicknesses of card
Autumn	Year 6	Electronics	Investigate a range of existing products comparing the technical structures chosen by the designer Critically evaluate how the designs are suitable / not suitable for the consumer / user	Include a range of technical skills within one product.	Know how budget and profit could change their designs / products	Ensure the needs of the user is reflected in annotations (functions and aesthetics) Designs show cross sections and exploded views Make annotations to explain how different parts work within their design Make design choices within a budget	Make annotations during the making process to reflect changes made to overcome difficulties in functions and aesthetics	Make evaluations to reflect the outcomes of budget and profit	Crafting knife Laminator Wires Bulbs Buzzer Batteries Foil Paper Clips Saw Hot melt (advice needed) Card Angle cutter Different sized wood Different thicknesses of card

		Area of DT	Evaluate products	Technical	Explore	Design	Making	Evaluate	Equipment / Tools
				Knowledge					
	Year 5	Food	Investigate a range of existing products making comparisons between them Critically evaluate the quality of design (aesthetics and functions)	Know which food is 'caught' Prepare a balanced meal reflecting a healthy plate Use a range of cooking techniques including the addition of grill or bbq	To explore a wide range of resources identifying the pro and cons of using the various resources trialled	Identify who they are designing for and its purpose Design products based on resources available to them. Find creative solutions when resources are limited Designs show exploded views	Make annotations during the making process to reflect changes made to overcome difficulties in functions and aesthetics	Compare their designs to designers studied. Make detailed evaluations for aesthetics and function	Pestle and mortar Grill / bbq Skewers Fridge All equipment in KS2 so far
Spring	Year 6	Lego	Investigate a range of existing products comparing the technical structures chosen by the designer Critically evaluate how the designs are suitable / not suitable for the consumer / user		Know how budget and profit could change their designs / products	Ensure the needs of the user is reflected in annotations (functions and aesthetics) Designs show cross sections and exploded views Make annotations to explain how different parts work within their design Make design choices within a budget	Make annotation to record changes made to keep to budget.	Make evaluations to reflect the outcomes of budget and profit	

		Area of DT	Evaluate products	Technical	Explore	Design	Making	Evaluate	Equipment / Tools
				Knowledge					
ler	Year 5	Cams	Investigate a range of existing products making comparisons between them Critically evaluate the quality of design (aesthetics and functions)	To make cams for moving parts Axle Crank Handle Follower Cams: cams link Some common types of cams Found Exercise Oral Ellipsial	To explore a wide range of resources identifying the pro and cons of using the various resources trialled	Identify who they are designing for and its purpose Design products based on resources available to them. Find creative solutions when resources are limited Designs show exploded views	Make annotations during the making process to reflect changes made to overcome difficulties in functions and aesthetics	Compare their designs to designers studied. Make detailed evaluations for aesthetics and function	Cams Wheels Crafting knife Laminator Wire Saw Hot melt (advice needed) Card
Summer	Year 6		Investigate a range of existing products comparing the technical structures chosen by the designer Critically evaluate how the designs are suitable / not suitable for the consumer / user	Heal Heagonal Shi Shall	Know how budget and profit could change their designs / products	Ensure the needs of the user is reflected in annotations (functions and aesthetics) Designs show cross sections and exploded views Make annotations to explain how different parts work within their design Make design choices within a budget	Make annotation to record changes made to keep to budget.	Make evaluations to reflect the outcomes of budget and profit	