Curriculum Progression - DT

		Year group						
EYFS/NC objectives		**EYFS**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Designing **(EYFS ELGs – Creating with materials** **KS1 –** design purposeful, functional, appealing products for themselves and other users based on design criteria generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology **KS2 -** use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion,	**Skills**	Create collaboratively, share ideas and use a variety of resources to make products inspired by existing products, stories or their own ideas, interests or experiences.	Create a design to meet simple design criteria.	Generate and communicate their ideas through a range of different methods.	Develop design criteria to inform a design.	Use annotated sketches and exploded diagrams to test and communicate their ideas.	Use pattern pieces and computer-aided design packages to design a product.	Develop design criteria for a functional and appealing product that is fit for purpose, communicating ideas clearly in a range of ways.
	Assessment Pieces	Fireworks painting (Divali and Bonfire Night) (Aut) Giant angel painting using bubble wrap, feathers, fingers (Aut) Giant cloud, sun using various materials (Spring)	Design, make and evaluate a diamond kite Design a fire engine Design a healthy fruit salad	Titanic shoe box rooms	Robots (Design Criteria: needs a hole for the light to go through, needs to stand up when heavy electrical equipment is added etc)	Final pop-up book at end of project. Christmas shortbread packaging.		Children's design booklet for their Viking long boat model.
	Project taught	How do we Remember? Are we there yet? What's Up There?	Who should look after our world? How do we move? Why does Easter matter to Christians?	How has the sea changed over time?	What does it mean to be human?	Autumn Who were the Greatest Builders?		What are the ingredients for change?

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annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **)**								
Making **(EYFS ELGs – Creating with materials** **KS1 –** select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics **KS2 -** select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including	**Skills**	Use digital devices to take digital images or recordings of their creations to share with others.	Use design software to create a simple plan for a design.	Use design software to create a simple labelled design or plan.	Write a program to make something move on a tablet or computer screen.	Write a program to control a physical device, such as a light, speaker or buzzer.	Link a physical device to a computer or tablet so that it can be controlled (such as changing motor speed or turning an LED on and off) by a program.	Use a sensor to monitor an environmental variable, such as temperature, sound or light.
	Assessment Pieces	Children are beginning to use the Ipad to take photos and videos of each other's learning					Crumble – Making a fan Making traffic lights	
	Project taught	What's Up There? What's down here? What Changes?					What does it mean to be great?	

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construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities**)**								
Evaluating **(EYFS ELGs – Creating with materials** **KS1 –** explore and evaluate a range of existing products evaluate their ideas and products against design criteria **KS2 -** investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world	**Skills**	Adapt and refine their work as they are constructing and making. Recognise that it is possible to change and alter their designs and ideas as they are making them.	Talk about their own and each other's work, identifying strengths or weaknesses and offering support.	Explain how closely their finished products meet their design criteria and say what they could do better in the future.	Suggest improvements to their products and describe how to implement them, beginning to take the views of others into account.	Identify what has worked well and what aspects of their products could be improved, acting on their own suggestions and those of others when making improvements.	Test and evaluate products against a detailed design specification and make adaptations as they develop the product.	Demonstrate modifications made to a product as a result of ongoing evaluation by themselves and to others
		Describe what, why and how something was made and compare with others. Look closely at similarities and differences (Understanding the World)	Describe the similarities and differences between two products.	Compare different brands of the same product and explain their similarities and differences.	Explain the similarities and difference between the work of two designers	Create and complete a comparison table to compare two or more products.	Survey users in a range of focus groups and compare results.	Create a detailed comparative report about two or more products or inventions.
		Name and explore a range of everyday products and begin to talk about how they are used.	Name and explore a range of everyday products and describe how they are used.	Explain how an everyday product could be improved.	Explain how an existing product benefits the user.	Investigate and identify the design features of a familiar product.	Explain how the design of a product has been influenced by the culture or society in which it was designed or made.	Analyse how an invention or product has significantly changed or improved people's lives.
			Describe why a product is important.	Explain why a designer or inventor is important.	Describe how key events in design and technology have shaped the world.	Explain how and why a significant designer or inventor shaped the world.	Describe the social influence of a significant designer or inventor.	Present a detailed account of the significance of a favourite designer or inventor.
	Assessment Pieces	Throughout the provision in the creative area, free creative, making junk modelling models, construction	Children make their own kites/fire engine/fruit salad and evaluate	Children make their own hand puppets and evaluate		Autumn: Pop Up Books, skills embedded throughout rest of year. Christmas: Shortbread and		Children's Anglo-Saxon settlements. Children's designs, models and evaluations of a Viking long boat.

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		models progression of skills and resources throughout the year.				shortbread packaging.		
	Project taught	What Makes Me Special? How do we remember? What's up there? What's down here?	Who should look after our world? Why does Easter matter to Christians? How do we move?	What makes us strong?		Who were the greatest builders? What is the Trinity?	Where will my journey take me?	What are the ingredients for change?
Technical Knowledge **(EYFS ELGs – Creating with materials** **KS1 –** build structures, exploring how they can be made stronger, stiffer and more stable explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. **KS2 -** apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]	**Skills**	Construct simple structures and models using a range of materials.	Construct simple structures, models or other products using a range of materials.	Explore how a structure can be made stronger, stiffer and more stable.	Create shell or frame structures using diagonal struts to strengthen them.	Prototype shell and frame structures, showing awareness of how to strengthen, stiffen and reinforce them.	Build a framework using a range of materials to support mechanisms.	Select the most appropriate materials and frameworks for different structures, explaining what makes them strong.
		Constructs with a purpose in mind using a variety of resources	Select and use a range of materials, beginning to explain their choices.	Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect.	Plan which materials will be needed for a task and explain why.	Choose from a range of materials, showing an understanding of their different characteristics.	Select and combine materials with precision.	Choose the best materials for a task, showing an understanding of their working characteristics.
		Identify products that use electricity to make them work.	Identify products that use electricity to make them work and describe how to switch them on and off.	Evaluate and discuss electrical products.	Create an operational, simple series circuit. Incorporate a simple series circuit into a model.	Incorporate circuits that use a variety of components into models or products.	Use electrical circuits of increasing complexity in their models or products, showing an understanding of control.	Understand and use electrical circuits that incorporate a variety of components (switches, lamps, buzzers and motors) and use programming to control their products.
		Explore, build and play with a range of resources and construction kits with wheels and axles. making vehicles).	Use wheels and axles to make a simple moving model.	Use a range of mechanisms (levers, sliders, wheels and axles) in models or products.	Explore and use a range of mechanisms (levers, sliders, axles, wheels and cams) in models or products.	Explore and use a range of mechanisms (levers, axles, cams, gears and pulleys) in models or products.	Use mechanical systems in their products, such as pneumatics and hydraulics.	Explain and use mechanical systems in their products to meet a design brief.

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understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] apply their understanding of computing to program, monitor and control their products.				(Use slides / levers to make a Christmas card)	Make a roman catapult	Use pulleys to make a drawbridge	Use pulleys to make a drawbridge	
		Know different ways to join and decide when appropriate to use them.	Follow the rules to keep safe during a practical task. Rules are made to keep people safe from danger.	Work safely and hygienically in construction and cooking activities.	Use appliances safely with adult supervision. Electrical appliances must only be used under the supervision of an adult.	Work safely with everyday chemical products under supervision, such as disinfectant hand wash and surface cleaning spray.	Explain the functionality and purpose of safety features on a range of products.	Demonstrate how their products take into account the safety of the user.
	Assessment Pieces	Throughout the provision, making circuits, role play area, toys with batteries Outside building with wheels, screws, using crates and bricks with purpose (space ships, cars, bonfire) Creating own books, hole punchers, string, treasury tags, staples	Design and make a fire engine using wheels, axles and chassis Design and make a kite	Building cardboard castles Titanic shoe box rooms Christmas Card: Slider/ Easter Card: Lever		Autumn: Sheduf to collect Nile water.	Bridge building project	Children's Anglo-Saxon settlement models and Viking long boat models.
	Project taught	What makes me special? How do we remember?	How do we move? Who should look after our world?	What makes us strong? How has the sea changed over time?			Where will my journey take me?	What are the ingredients for change?

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		What's up there? What's down here? What Changes?						
Cooking and Nutrition **(EYFS ELGs – Creating with materials** **KS1 –** use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from. **KS2 -** understand and apply the principles of a healthy and varied diet prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques understand seasonality, and know where and how a variety of ingredients are grown, reared,	**Skills**	Follow instructions including simple recipes that include measures and ingredients.	Measure and weigh food items using non-standard measures, such as spoons and cups	Prepare ingredients by peeling, grating, chopping and slicing.	Prepare and cook a simple sweet or savoury dish.	Identify and use a range of cooking techniques to prepare a simple meal.	Use an increasing range of preparation and cooking techniques to cook a sweet or savoury dish.	Follow a recipe that requires a variety of techniques and source the necessary ingredients independently.
		Suggest healthy ingredients that can be used to make simple snacks	Select healthy ingredients for a fruit or vegetable salad.	Describe the types of food needed for a healthy and varied diet and apply the principles to make a simple, healthy meal. Link to Titanic and French food – make a French soup	Identify the main food groups (carbohydrates, protein, dairy, fruits and vegetables, fats and sugars).	Design a healthy snack or packed lunch and explain why it is healthy.	Evaluate meals and consider if they contribute towards a balanced diet.	Plan a healthy weekly diet, justifying why each meal contributes towards a balanced diet.
		Begin to identify the origins of some foods. Select appropriate tools to cut .	Sort foods into groups by whether they are from an animal or plant source.	Identify the origin of some common foods (milk, eggs, some meats, common fruit and vegetables).	Identify and name foods that are produced in different places.	Identify and name foods that are produced in different places in the UK and beyond.	Describe what seasonality means and explain some of the reasons why it is beneficial.	Explain how organic produce is grown.
	Assessment Pieces	Making stewed apple after harvest Making salt dough Making gingerbread men	Design, make and evaluate a healthy fruit salad.	Yr 2 Forest School over the year.	Yr 3 Forest School over the year.			
	Project taught	What makes us special?	Why does Easter					

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caught and processed**)**		What's down here? What changes ?	matter to Christians?					

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