## Key Skills

Develop creative, technical and practical expertise to problem solve. Design and make high quality prototypes and products for a range of users. Critique, evaluate and test ideas and products.

## Design & Technology Curriculum Progression Map

DT skills should be taught when linked to themes where possible to ensure real world application Themes are taught on a 2 year rolling programme



## NC statutory requirement Skills Knowledge

	EYFS Nursery & Reception		KS1		LKS2		UKS2	
			Year 1 & Year 2		Year 3 & Year 4		Year 5 & Year 6	
	Year A	Year B	Year A	Year B	Year A	Year B	Year A	Year B
	Autumn: Harvest/Light and Dark Spring: Winter Wonderland/Supe rheroes Summer: Big and Small/Summer Fun	Autumn: Colours/Let's Celebrate Spring: Bears/A Job Well Done Summer: Marvellous Minibeasts/Summ er in the Garden	Autumn: Let's Go on Safari Spring: Poles Apart Summer: Around the World in 80 Days	Autumn: Oh I do Like to be Beside the Seaside/Then and Now Spring: Turrets and Tiaras Summer: The Secret Garden	Autumn: The Land that Time Forgot Spring: Romans Summer: Rainforests	Autumn: Egyptians Spring: Over and Under the Waves Summer: WWII Friend or Foe	Autumn: Extreme Earth Spring: Who Were the Mayans? Summer: Evolution and Inheritance	Autumn: Myths and Minotaurs Spring: Out of this World Summer: Circle of Life – Vikings vs Anglo-Saxons
Design	Begin to draw a design of their own Use materials to create a picture of their design Talk about what they are doing during each stage	Make pictures of their design saying what they want to make Use criteria to design and make purposeful, functional items	Tudor houses: Design and make purposeful and functional products Use pictures and words to convey what they want to design and make Describe and explain what they are making, how it works and what they need to do next	Christmas stocking: Design and make purposeful, functional and 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 ICT. Discuss their work as it progresses	Aqueducts Bean bag tree frog Use research to develop the design of functional and appealing products that are fit for purpose Record plan by drawing labelled sketches or writing and discuss this while working	Egyptian sculptures and moving picture/book & Dunkirk boat/plane Over & Under the Waves - bridges Use research to develop design criteria to inform the design of functional and appealing products that are fit for purpose (bridges - arch. beam, suspension designs) Consider different	Design own chocolate Bug houses Use research and develop design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at particular groups or individuals Develop and communicate design	Greek weapons, moving part space pics/space station, Viking helmet, shield, jewellery Use research and exploration to identify and understand user needs when designing a product Generate, develop, model and communicate design ideas using



						ways in which they can creatively record their planning to engage an audience	ideas using annotated sketches, detailed plans, oral and digital presentations	discussion, annotated sketches, cross- sectional and exploded diagrams, prototypes detailed plans, oral and digital presentations and computer based tools.
	EYFS		KS1		LKS2		UKS2	
	Nursery & Reception			& Year 2		& Year 4		& Year 6
	Year A	Year B	Year A	Year B	Year A	Year B	Year A	Year B
Make	Use and explore a variety of materials Use a variety of tools and techniques	Use equipment safely Use the correct tools for the job Know the tools they are using eg scissors, hole punch	Tudor houses Brazilian Carnival mask, Native American dream catcher, Japanese fan Select from, name and use a range of tools and equipment to perform practical tasks (Eg, cutting, shaping, joining and finishing) Select from and use a wide range of materials e.g. paper, card, ingredients, fabrics, sequins, buttons, tubes, dowel, cotton reels, paper, card, mouldable materials Select from and use a wide range of tools e.g. Knife, grater, chopping board, scissors, needles,	Christmas stocking Rapunzel tower with winding mechanism Select from, name and use a range of tools and equipment to perform practical tasks (Eg, 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	Roman Villas, Aqueducts Bean bag tree frog Select from and use a wider range of tools and equipment, including those needed to weigh and measure ingredients, to perform practical tasks Select from and use a wider range of materials and components, including construction materials, textiles according to their functional qualities Select from a wider range of ingredients	Egyptian Sculptures and moving picture/book & Dunkirk boat/plane Bridges - Use tools and equipment to perform practical tasks Join and combine a range of materials, some with temporary, fixed or moving joints	Mayan accessory Bug houses Select from and use a wider range of tools and equipment to perform practical tasks Select from and use a wider range of materials and components, including construction materials, textiles according to their functional qualities	Greek weapons, moving part space pics/space station, Viking helmet, shield, jewellery Select from and use a wider range of tools and equipment to perform practical tasks Select from and use a wider range of materials and components, including construction materials, textiles according to their functional and aesthetic qualities



	EY	FS	pins, scissors, templates, glue, tape Join appropriately for different materials and situations	51	Li	(52	Uk	.52
	Nursery &	Reception	Year 1 & Year 2		Year 3 & Year 4		Year 5 & Year 6	
	Year A	Year B	Year A	Year B	Year A	Year B	Year A	Year B
Evaluate	Represent their own ideas through their work Talk about their creation and how they got to the finished product	Say what they like and dislike about products that are already known Begin to say how they could improve a product offering own idea	Evaluate their ideas and products against design criteria. Compare others products and evaluate their effectiveness of techniques. Tudor house/ Brazilian mask	Explore & evaluate a range of existing products -explore winding mechanisms. Evaluate their ideas and products against design criteria. (Princess tower)	Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria Understand how key events and individuals in design and technology have helped shape the world.	Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria (bridge/plane/Dunkir k boat) Understand how key events and individuals in design and technology have helped shape the world	Investigate and analyse a range of existing products (floating raft) Evaluate their ideas and products against their own design criteria (Mayan sewing Bug houses)	Investigate and analyse a range of existing products (moving part space pic) Evaluate their ideas and products against their own design criteria (Greek shield, Viking helmet) Understand how key events and individuals in design and technology have helped shape the world (changing design of Greek weapon to Viking weapon)
		FS	K		LKS2		UKS2	
	Nursery &	Reception		& Year 2		& Year 4		& Year 6
	Year A	Year B	Year A	Year B	Year A	Year B	Year A	Year B
Technical knowledge	Build using a variety of materials Begin to say how they made their structure	Build structures using different materials	Build structures, exploring how they can be made stringer, stiffer and	Explore and use mechanisms (winding)	Apply their understanding of how to strengthen, stiffen and reinforce more	Apply their understanding of how to strengthen, stiffen and reinforce more complex	Apply their understanding of how to strengthen, stiffen and reinforce more	Apply their understanding of how to strengthen, stiffen and



		Begin to make suggestions to make structures stronger and more stable Begin to explore mechanisms such as levers, wheels and axels using construction	more stable (Tudor houses) Use mechanisms e.g. sliding door, lever to open windows etc.	Build structures, explore how they can be made stronger.	complex structures (Aqueducts Explore and use mechanisms: temporary, fixed and moving joins (levers, sliders - moving pics book)	structures (Bridge design Over & Under the waves) Create shell or frame structures and make structures more stable (Bridge design Over & Under the waves)	complex structures (bug houses)	reinforce more complex structures Understand and use mechanical systems (moving space pic) Understand and use electrical systems in products (design & make space rocket/station) Apply and use understanding of computing to program monitor and control products.(K'Nex space buggy)
	EYFS		KS1		LKS2		UKS2	
	Nursery &	1		& Year 2		& Year 4		& Year 6
Cooking & Nutrition	Year A Name and identify everyday fruit and vegetables.	Year B Understand the importance of breakfast and the need to have a mixture of different food types.	Year A Use the basic principles of a healthy and varied diet (fruit salad or pizza toppings) Understand where food comes from through research and stories such as Handas Surprise. Use a range of basic cooking equipment (eg knife, chopping board, spoon, fork, bowl) to make a fruit salad/pizza topping.	Year B Use the basic principles of a healthy and varied diet Select from and use a range of tools and equipment learning about healthy foods and making salads and smoothies. Discuss seasonality, and know how food is reared, caught and processed. Design, make and evaluate (discuss what they likes/didn't like) about a dish of their choice.	Year A 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 through Iron Age Stew Understand seasonality, and know where and how a variety of ingredients are grown, caught and processed	Year B 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 through Dig For Victory! Understand seasonality, and know where and how a variety of ingredients are grown, caught and processed.	Year A 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 Know where and how a variety of ingredients are grown, caught and processed. (Mayan food)	Year B 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, caught and processed.

