Curriculum Skills and Progression Map Design & Technology: 2023 to 2024









The Design and Technology Curriculum and Christian Distinctiveness

at Horsford CofE VA Primary School

"The Lord has made everything for its own purpose," Proverbs 16:4

Courage – While exploring Design & Technology, we hope that children will feel courageous to explore new and challenging concepts to design, create and evaluate products that may be far from their usual interests or 'comfort zone'.

Compassion – An essential part of Design & Technology is the ability to objectively evaluate how successful our endeavours were. We recognise that not all of our attempts will turn out the way we wanted, and that this is an important part of the Design & Technology process. We encourage the children to show compassion to themselves and others as they go through this process.

Responsibility – At Horsford C.E. V.A. Primary school, we give the children all the support they need with tackling new Design & Technology challenges, and we instil that it is their responsibility to always try the best they can – whatever their initial ability might be, and to take care of the Design & Technology resources they use with increasing care and attention.

Our story of 'The Good Samaritan' teaches the children to work together and to support each other in their Design & Technology learning, even if they would not usually choose to be friends.

'Spirituality is the bitter-sweet yearning for beauty, truth, love and wonder beyond ourselves. It is a longing we pursue together and a treasure we glimpse in ourselves and one another and seek beyond us into eternity. It is life in all its fullness.'







The Design and Technology Curriculum and Provision for Pupils with SEND

At Horsford C of E VA Primary school, we believe all pupils should have the opportunity to learn to the best of their capabilities through a broad and balanced, inclusive curriculum. For our pupils with a Special Educational Need, we scaffold their learning to provide them with the strongest opportunities for success in our school. We believe firmly in the SEND Code of Practice's statement that 'every teacher is a teacher of SEN' and that our pupils with SEN should be provided with the same opportunities as their peers in our school. This means that, with their learning being personalised to meet their areas of need, they feel included in the classroom and make progress year on year. Reasonable adjustments are made in all lessons to enable this.

The Design and Technology curriculum can be adapted to meet the needs of children with SEND in the following ways.

Coloured Paper or recycled paper to minimise visual stress	Having a study buddy
Breaking down lessons into short, manageable chunks	Checking seating position – sight problems – near the back for sensory
	needs
Mixed ability groups – using peers as support and role models	Writing slopes
Adult assistance nearby	Whiteboards for practising writing or note taking (flowing)
Recording ideas on whiteboards as an aide memoire	A safe/quiet space in or near the classroom
Recording devices to record their answers/sentences – talking tins, iPad	Special interest projects linked to and alongside class learning
My Turn/Your Turn	Proud/success book
Breaks	Social stories
Targets made clear for lessons and learning – linked to IEP	Extra time for the trickier tasks
Now/Next	Visual and picture aids
Visual Timetables – class and individual	Pencil grippers – variety of pens and pencils
Coloured Paper for visual stress	Variety of pens/writing implements
Cushions for seats – wobble and wedge cushions	Success book
Headphones/ear defenders	Ask the child what they need
Gloves/Plastic Paper (So don't have to touch paper)	Tall tables where children can stand and work
Word lists of key vocabulary for pre-learning and as prompts	Trying a 1:1 adult/adult nearby
Relevant word banks of common language for different subjects	

When planning for Design and Technology class teachers should adapt their lessons where necessary using ideas taken from this list, however it is important to remember this list is not exhaustive and other adaptations may be needed for children with specific needs.



DESIGN 8	& TECHNOLOGY: AGE RELATED STATUTORY C	COVERAGE
EYFS	KEY STAGE ONE LEARNING	KEY STAGE TWO LEARNING
Expressive Arts and Design EYFS Statutory Educational Programme: The development of children's artistic and cultural awareness supports their imagination and creativity. It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range of media and materials. The quality and variety of what	 DESIGN Design purposeful, functional, appealing products based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and ICT and, where appropriate, information and communication technology 	 DESIGN Use research and develop 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 ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
children see, hear and participate in is crucial for developing their understanding, self-expression, vocabulary and ability to communicate through the arts. The frequency, repetition and depth of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe. <u>DESIGN</u>	 MAKE 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, ingredients according to their characteristics 	 MAKE 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 construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.
• Talk about what they want to make MAKE	EVALUATE • Explore and evaluate a range of existing products	EVALUATEInvestigate and analyse a range of existing products
• Use a variety of tools and materials to make models.	• Evaluate ideas and products against design criteria	• Evaluate ideas and products against their own design criteria and consider the views of others to improve their work
 Creating with materials ELG Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; 	 TECHNICAL KNOWLEDGE 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. 	 Understand how key events and individuals have helped shape the world TECHNICAL Apply their understanding of how to strengthen, stiffen and reinforce more complex structures
 Physical development: Fine Motor Skills ELG Use a range of small tools, including scissors, paint brushes and cutlery; competently, safely and confidently. EVALUATE Be excited about what they have made 	 COOKING AND NUTRITION use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from. 	 Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] 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 products.
 Share their creations, explaining the process they have used; Make use of props and materials when role playing characters in narratives and stories. 		 COOKING AND NUTRITION 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, caught and processed.



		Skills Map – Design & Technology						
	Early Years							
		Reception Statements						
	Design	Make	Evaluate					
 Talk about what they want to make, individually and collaboratively. Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; Use a range of small tools, including scissors, paint brushes and cutlery; competently, safely and confidently. Use a variety of tools and materials to make models. 								
Skills	 Think of their own ideas. Consider which materials to use. Plan how best to approach a task. 	 Select appropriate resources & tools. Work safely and hygienically with support. Join materials, using tape or glue. 	• Describe the making process and say if their product works as they wanted it to and if they like it or not.					
		Design Inquiry						
and	Design and Technology is covered throughout the year through weekly themes taken from the interests of the children. A weekly hook sheet is published and Design Technology work can be identified on it. Weekly enhanced provision is planned to ensure the children have the opportunity to explore designing and making skills independently throughout the week.							
		Greater Depth						
	ough regularly returning to the processes invol- achieved.	ved in Design & Technology, greater depth of knowle	dge and understanding in a range of contexts will					



				Skills Map – Desig	n 8	& Technology			
				Year	1				
Cycle 1	Autumn 1 DT: Wolf Trap	Autun	nn 2	Spring 1		Spring 2	DT: Ma	nmer 1 ke a hinged ure chest	Summer 2 DT: Where food comes from
Cycle 2	DT: Tea Party	DT: Rocket	t Crawler		1	DT: Make a boat			
	Technical Knowledge	e	C	Design		Make			Evaluate
Objectives D D D D D D D D	uild structures, exploring h ney can be made stronger, s nd more stable xplore and use mechanisms xample, levers, sliders, whe nd axles], in their products ooking & Nutrition: Use the rinciples of a healthy and v iet to prepare dishes ooking & Nutrition: Unders where food comes from.	stiffer al di s [for • G els co ta basic m aried al	ppealing pro esign criteri Generate, de ommunicate alking, draw nock-ups and ppropriate,	velop, model and e their ideas through ing, templates,		Select from and use a ran tools and equipment to p practical tasks [for exam cutting, shaping, joining a finishing] Select from and use a win of materials and compor including construction m textiles, ingredients, acco their characteristics	berform ple, and de range hents , aterials,	existing pr • Evaluate th	d evaluate a range of oducts heir ideas and products sign criteria
Skills		w w • U a d • U	vhat the pro vill work. Jse pictures product for esign criter Jse knowled	they want to do, duct is for and how it and words to design myself following ia. ge of existing produce ideas.	•	Independently work safe hygienically. Sort materials, compone ingredients according to characteristics , with sup Select appropriate tools, techniques or equipment support to make structu mechanisms . Measure, mark out , cut shape, with support	ents or their port. t. with res &	 and 'isn't existing p Begin to t 	alk about what 'is good good' about a range of 'oducts . alk about ideas and against design criteria .
				Greater I	Dep	oth			
Througl achieve	n regularly returning to the d.	processes inv	olved in Des				l understan	ding in a range	e of contexts will be



			Skills Map – Design	•			
	Autumn 1	Autumn 2	Year 2 Spring 1	2 Spring 2		nmer 1	Summer 2
Cycle 1	DT: Wolf Trap					ke a hinged ure chest	DT: Where food comes from
Cycle 2	DT: Tea Party	DT: Rocket Crawler		DT: Make a boat		Ι	
	Technical Knowledg ild structures, exploring h	ow • Design purpe	Design Deseful, functional,	• Select from and use a ra	-		Evaluate nd evaluate a range of
Opjectives Opjectives Opjectives Opjectives Opjectives Opjectives Opjectives	ey can be made stronger, s d more stable plore and use mechanism ample, levers, sliders, whe d axles], in their products oking & Nutrition: Use th inciples of a healthy and v et to prepare dishes oking & Nutrition: Unders nere food comes from.	s [for eels e basic varied basic bas	oducts based on ia. evelop, model and e their ideas through ving, templates, d ICT and, where information and ion technology.	 tools and equipment to practical tasks [for exam cutting, shaping, joining finishing] Select from and use a w of materials and compo including construction n textiles, ingredients, acc their characteristics 	iple, and ide range nents, naterials,		roducts their ideas and products esign criteria
Skills		 words, mode Design products Research simproducts. Make lists of 	C	 Explain how to work safe hygienically, with support of the support of the support of the support of the suggestions as to with the suggestions as the suggestions as to with the suggestions as to with the suggestin the suggestion	rt. erials, nts cteristics. what I chniques	 about des Talk abour considerin they work might be roopinion Talk abour 	what went well, thinking ign criteria t existing products ig use, materials, how , audience , where they used; express personal t what I would do y if I were to do it again
			Greater D				
Through achieved		processes involved in De	sign & Technology, grea	ter depth of knowledge and	lunderstan	ding in a range	e of contexts will be



	Skills Map – Design & Technology								
					Year				
		Autumn 1	Autumn 2		Spring 1 Spring 2 Summer 1		Summer 1		Summer 2
Сус	cle 1		DT: Pop-up boo	<mark>oks -</mark>		European Structures	Vegetable Soup		
Сус	cle 2	DT: Puppets – Light & Sound				DT: Bread making – Romans	DT: Making a kite		
		Technical Knowl	edge		Design	Make	2		Evaluate
Objectives	 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] Cooking & Nutrition: 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, caught and processed. 				esearch and develop criteria orm the design of innovative, ional, appealing products that t for purpose, aimed at cular individuals or groups rate, develop, model and nunicate ideas through ssion, annotated sketches, -sectional and exploded ams, prototypes, pattern s and computer-aided design	 to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and 			vestigate and analyse a range existing products. valuate ideas and products gainst their own design criteria and consider the views of others improve their work. Inderstand how key events and dividuals in Design Technology ave helped shape the world.
Skills				 Sho req Des acc wor Ma 	ke detailed lists of materials ngredients needed.	 Independently demonstrate hory hygienically. Begin to measure, mark out, cumaterials/components with some accurate begin to assemble, join and concomponents with some accurate Begin to apply their understand stiffen and reinforce more components. Begin to understand and use more durates and the stand and apply & varied diet. Begin to prepare and cook a vasavoury dishes using a range of the stand and apple disteries and the stand and apply a savoury dishes using a range of the standard and the standard dist. 	It and shape me accuracy . mbine materials and cy. ding of how to strengthen, aplex structures. Bechanical systems in their the principles of a healthy riety of predominantly	•	Use design criteria to evaluate finished product. Identify what you would change to make design better. Begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose Learn about some inventors/designers/ engineers/chefs/ manufacturers of ground- breaking products
					Greater D	•			
	ough ieved		processes involve	d in De	sign & Technology, grea	ter depth of knowledge and	l understanding in a ra	ange	of contexts will be



Skills Map – Design & Technology									
				Y	ear 4		1		
	Autumn 1	Autum		Spring 1		Spring 2	Su	mmer 1	Summer 2
Cycle 1		DT: Rock Cake Eart				DT: Pop-up books - Easter			DT: Norman Castles
Cycle 2	DT: Puppets – Light & Sound					DT: Bread making – Romans	DT: Ma	aking a kite	
	Technical Knowled	dge		Design		Make			Evaluate
 Strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] Cooking & Nutrition: Understand and apply the principles of a healthy and varied dist 		criteria design o function product purpose particul groups • Generat and cor through annotat sectiona diagram pattern	earch and develop to inform the of innovative, hal, appealing is that are fit for e, aimed at ar individuals or te, develop, model mmunicate ideas discussion, red sketches, cross- al and exploded hs, prototypes, pieces and er-aided design	to pr sh ac Se ma co ing fu	lect from and use a wider ra ols and equipment to perfor actical tasks [for example, c aping, joining and finishing] curately lect from and use a wider ra aterials and components, in nstruction materials, textile gredients, according to their nctional properties and aest alities.	rm utting, , ange of cluding es and r	 existing pro Evaluate ide their own d the views o work. Understand individuals 	and analyse a range of ducts. eas and products against esign criteria and consider f others to improve their I how key events and in Design Technology have be the world.	
 Begin to create own d criteria. Suggest improvement design. Make and explain des decisions considering availability of resource 					str co • Ur sy: • Ur a h • Be pr	pply their understanding of l rengthen, stiffen and reinfor mplex structures. Inderstand and use mechanic stems in their products. Inderstand and apply the prin nealthy & varied diet. gin to prepare and cook a v edominantly savoury dishes nge of cooking techniques.	rce more cal nciples of ariety of	 Begin to export original destricts by a products we products we recycled or Know about inventors/d engineers/d 	whom, when and where ere designed hether products can be reused . t some
				Great	er Dep	th		~	<u>.</u>
Through achieved	regularly returning to the I.	processes inv	olved in De	sign & Technology,	greate	r depth of knowledge and	d understan	ding in a range	e of contexts will be



			Year 5				1
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1 DT: Healthy Lunc	hes	Summer 2
Cycle 1			DT: Towers, domes & bridges	DT: Towers, domes & bridges	(Jamie Oliver case s		
Cycle 2		DT: WW1 Trench Model		DT: Kingdom – Bread and cakes			DT: Cams Toy
	Technical Kno	owledge	Design	Mak	e		Evaluate
Objectives	Apply their understanding of how to reinforce more complex structures Understand and use mechanical sys example, gears, pulleys, cams, levers Understand and use electrical system example, series circuits incorporatin motors] Apply their understanding of compu control their products. Cooking & Nutrition: Understand an healthy and varied diet. Prepare and cook a variety of predou range of cooking techniques. Understand seasonality, and know v ingredients are grown, reared, caug	tems in their products [for s and linkages] ms in their products [for g switches, bulbs, buzzers and ting to program, monitor and d apply the principles of a minantly savoury dishes using a where and how a variety of	 Use research and develop criteria to inform the design innovative, functional, appealing products that are for purpose, aimed at particular individuals or grou Generate, develop, model ar communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces a computer-aided design 	 [for example, cutting, s finishing], accurately Select from and use a w materials and compone construction materials, ingredients, according t properties and aesthetic 	orm practical tasks haping, joining and vider range of ents, including textiles and to their functional	 exist Evalution Evalution their consideration Under the individual of the	stigate and analyse a range of ing products. uate ideas and products against own design criteria and ider the views of others to ove their work. erstand how key events and iduals in Design Technology helped shape the world.
Skills			 Use internet & questionnair for research & design ideas. Create own design criteria. Produce a logical, realistic pl & explain it to others. Make design decisions considering time & resource Use computer-aided designs 	 systems in their product Begin to understand an systems in their product Begin to apply their understand to apply their understand to apply their understand, their products. Confidently understand principles of a healthy a Prepare and cook a var savoury dishes using a techniques. 	fen and reinforce es. d and use mechanical ets. d use electrical ets. derstanding of monitor and control d and apply the and varied diet. iety of predominantly	again purp • Test • Rese are. • Talk inve chef	uate ideas & finished product nst specification, considering ose and appearance. and evaluate final product. arch how sustainable material about some key ntors/designers/ engineers/ s/manufacturers of ground- king products
Greater Depth							



			Skills Map – Design &	Tech	nology			
	Autumn 1	Autumn 2	Year 6 Spring 1		Spring 2	Summer 1		Summer 2
Cycle 1	Addinini	Autumi 2	DT: Towers, domes & bridges	DT: To	wers, domes & bridges	DT: Healthy Lun Jamie Oliver case	<mark>ches</mark>	Summer 2
Cycle 2		DT: WW1 Trench Model		DT: I	Kingdom – Bread and cakes			DT: Cams Toy
	Technical Kno		Design		Ma	ke		Evaluate
Opjectives Opject	oly their understanding of how to s re complex structures lerstand and use mechanical syste mple, gears, pulleys, cams, levers a lerstand and use electrical system es circuits incorporating switches, oly their understanding of computin trol their products. king & Nutrition: Understand and varied diet. pare and cook a variety of predom ge of cooking techniques. lerstand seasonality , and know whe redients are grown, reared, caught	ms in their products [for and linkages] s in their products [for example, bulbs, buzzers and motors] ang to program, monitor and apply the principles of a healthy inantly savoury dishes using a here and how a variety of	 Use research and develop cr to inform the design of innor functional, appealing produc are fit for purpose, aimed at particular individuals or grou Generate, develop, model an communicate ideas through discussion, annotated sketch cross-sectional and exploded diagrams, prototypes, patter pieces and computer-aided of 	vative, cts that ups nd nes, d rn	 Select from and use tools and equipmen practical tasks [for shaping, joining and accurately Select from and use materials and comp construction mater ingredients, accord properties and aest 	nt to perform example, cutting, d finishing], e a wider range of ponents, including ials, textiles and ing to their functional	exist • Eval their cons impr • Und indiv	stigate and analyse a range of ting products. uate ideas and products against r own design criteria and sider the views of others to rove their work. erstand how key events and viduals in Design Technology e helped shape the world.
Skills			 Draw on market research to inform design & identify feat of design that will appeal to intended user. Follow & refine a logical plar Make design decisions, considering, resources & cos 	tures the n.	 how to strengthen, more complex stru Confidently unders mechanical system Understand and us their products. Apply their underst to program, monito products. Confidently prepariof of predominantly s range of cooking te Understand season 	tand and use s in their products. e electrical systems in canding of computing or and control their e and cook a variety avoury dishes using a cchniques. ality, and know ariety of ingredients	idea crite • Begi	te a detailed evaluation of own s and products against design eria using technical language . in to compare and appraise own ducts against those created by rs.
			Greater Dep	th				
Through achieved		processes involved in Des	sign & Technology, greate	r deptl	n of knowledge and	l understanding ir	n a range	e of contexts will be



	DESIGN & TECHNOLOGY: VOCABULARY MAP								
	Technical Knowledge	Design	Make	Evaluate					
EYFS	materials	ideas materials plan tools	safely hygienically join materials	Describe creations					
Year 1	structures mechanisms cooking nutrition	product design design criteria purposeful functional appealing	components characteristics structures mechanisms mark out	products design criteria					
Year 2				audience opinion					
Year 3	mechanical systems seasonality reared	seasonality		evaluate ground-breaking					
Year 4	an undet	design decisions	assemble mechanical systems	recycled reused					
Year 5	electrical systems program			sustainable					
Year 6	monitor control	market research	monitor control	technical language appraise					



	Year 1	Year 2
Examples of Deeper Thinking Questions	 What would you change about your design? How could you make your design faster/stronger etc? What do you like about someone else's design? What would happen if you changed? 	 What could you do to make your design better? Find one thing that is better about someone else's design. How would you help someone who wanted to make their own? What is the best/worst thing about your design?
Cross-Curricular Links	 Cycle 1: Au1: Wolf Trap – Science (materials), English (Three Little Pigs), Geoge Sp1: Make a Cape – Science (superhero bodies), English (superhero s Su1: Make a Treasure Chest – English (pirate stories), History (shipwr Su2: Cooking and nutrition – Maths (measurement) Cycle 2: Au1: Tea Party – English (Fairy Tales) Sp2: Rocket Crawler –English (Stargazing), Science (rockets), History (sair) 	tories), History (superhero story – Edith Cavell) reck – Henry Blogg) (moon landing)
Suggested Writing Opportunities	 All DT topics can include writing for planning, designing and evaluating. Cycle 1: Au1: Wolf Trap – instructions for building a wolf trap, Designing & Ev Sp1: Make a cape – English (description of cape, stories with capes), Su1: Make a Treasure Chest – English (pirate stories), Designing & Ev Su2: Cooking and nutrition –writing recipes, Designing & Evaluating. Cycle 2: Au1: Tea Party – recipe writing, Designing & Evaluating. Sp2: Rocket Crawler – space stories, Designing & Evaluating. Su1: Design and make a boat – Designing & Evaluating, stories about 	aluating. Designing & Evaluating. aluating.



	Years	3&4	Years 5 & 6			
Examples of Deeper Thinking Questions	 Year 3 What could you change to improve your design? What made creating your design difficult? What questions would you ask if? 	 Year 4 Explain what you could change and how it would improve your design? How would you change your design for the 'real world'? How effective at Is your? 	 Year 5 How could you make your design more suited to mass production? What developments would need to be made for your design to? What tests would you need to do to? 	 Year 6 What would you need to change to be able to sell your design? How could you adapt to make? What do you predict would happen if? Judge whether would cause/change/affect 		
Cross-Curricular Links	 Cycle 1: Au1: Cooking a locally sourced meal-come from?), Science (Healthy Eating Sp2: Stone Age tool/jewellery – Histor fossils), English Y4 (Ug: Boy Genius or Su2: Cooking (Great bread Bake Off) (measures) Cycle 2: Au2: Christmas crafts and pop-up bo Sp2: Cereal Bars with raisins – Histor Su2: Roman Catapults – History (Roman Catapults – History (Rom	g) ory (the Stone Age), Science (Rocks and f the Stone Age). – Geography (earning a living), Maths oks y (Anglo-Saxons)	 Cycle 1: Sp1&2: Structures – Geography (North and South America) Su1: Creating a healthy, locally sourced meal – Science (the human body), Geography (locally sourced food), Maths (measurement) Cycle 2: Au2: WW1 designing a trench – English (War Poets & War Horse), History (WW1), Art (WW1 artists). Sp2: Cooking different types of bread –English (Historical stories, Anglo-Saxons & Vikings), Science (permanent changes of state), Maths (measurement) Su1: 3D map of UK/mountain range – English (Foodland), Geography (UK 			
Suggested Writing Opportunities	 fossils), English Y4 (Ug: Boy Genius of Su2: Cooking (Great bread Bake Off) ensured their product would make a Cycle 2: Au2: Christmas crafts and pop-up bo Sp2: Cereal Bars with raisins – Histor Recipe writing 	 Geography (explanation texts about bate about food sources), Science ces), Recipe writing bry (the Stone Age), Science (Rocks and f the Stone Age). Geography (discussion of how they profit), Recipe writing, advertising etc oks 	 geography) All DT topics can include writing for Cycle 1: Sp1&2: Structures – English/Geogra Su1: Creating a healthy, locally sour how it's healthy), Geography (debated of the cycle 2: Au2: WW1 designing a trench – English and life in a trench), History (WW1) Sp2: Cooking different types of breat recipes) Su1: 3D map of UK/mountain range 	phy (description of super-structures) ced meal – Science (recipes, explaining te about locally sourced food) lish/history (descriptions of trenches , Art (WW1 artists). Id – History (historically accurate		



Design & Technology Long Term Plan Key Stage One Years 1 and 2

Cycle One		Cycle Two	
Term/Theme enrichment	Coverage – see skills map	Term/Theme enrichment	Coverage – see skills map
<mark>A1: DT - Wolf Trap</mark>	Structures	<mark>A1: DT - Tea Party</mark>	Cooking and Nutrition
		A2: DT - Rocket crawler	Mechanisms
		<mark>Sp2: DT - Make a boat</mark>	Construction and Textiles
Su1: DT - Make a hinged treasure chest.	Mechanisms		
Su2: DT - Where food comes from.	Cooking and Nutrition		



Design & Technology Long Term Plan Lower Key Stage Two Years 3 and 4.

Cycle One		Cycle Two		
Term/Theme enrichment	Coverage – see skills map	Term/Theme enrichment	Coverage – see skills map	
		A1: DT – Shadow Puppets	Mechanisms	
<mark>A2: DT – Rock Cakes</mark>	Cooking & Nutrition			
<mark>Sp1: DT – Easter Pop-</mark> up Books	Mechanisms	<mark>Sp2: DT –</mark> Breadmaking, Romans	Cooking & Nutrition	
		<mark>Su1: DT – Making a</mark> <mark>Kite</mark>	<mark>Structures</mark>	
<mark>Su1: DT – Norman</mark> Castles	Structures			



Design & Technology Long Term Plan Upper Key Stage Two Years 5 and 6

Cycle One		Cycle two	
Term/Theme	Coverage – see skills	Term/Theme	Coverage – see skills
Enrichment	тар	Enrichment	map
		<mark>A2: DT – WW1 Trench</mark> <mark>Model</mark>	<mark>Structures</mark>
<mark>Sp1: DT – Towers,</mark> domes & bridges	<mark>Structure</mark>		
<mark>Sp2: DT – Towers,</mark> domes & bridges	Electrical systems Computing	Sp2: DT – Bread & Cakes	Cooking & Nutrition
Su1 – Healthy Lunches (Jamie Oliver case study)	Cooking & Nutrition		
		Su2: Cam Toys	Mechanical Systems

Design & Technology: Curriculum Skills and Progression Map

	Cumulative Design & Technology Skills Progression Ladder						
	Technical Knowledge	Design	Make	Evaluate			
R	 Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used. 	 Think of their own ideas. Consider which materials to use. Plan how best to approach a task. 	 Select appropriate resources & tools. Work safely and hygienically with support. Join materials, using tape or glue. 	• Describe the making process and say if what they made works as they wanted it to and if they like it or not.			
1	 Build structures, exploring how they can be made stronger, stiffer and more stable Explore and use mechanisms [for example, levers, sliders, 	 Explain what they want to do, what the product is for and how it will work. Use pictures and words to design a product for myself following design criteria. Use knowledge of existing products to produce ideas. 	 Independently work safely & hygienically. Sort materials, components or ingredients according to their characteristics, with support. Select appropriate tools, techniques or equipment. with support to make structures & mechanisms. Measure, mark out, cut and shape, with support 	 Begin to talk about what 'is good' and 'isn't good' about a range of existing products. Begin to talk about ideas and products against design criteria. 			
2	 wheels and axles], in their products Cooking & Nutrition: Use the basic principles of a healthy & varied diet to prepare dishes Cooking & Nutrition: Understand where food comes from. 	 Describe design using pictures, words, models & diagrams. Design products for myself & others following design criteria. Research similar existing products. Make lists of materials or ingredients they will need. 	 Explain how to work safely or hygienically, with support. Independently sort materials, components or ingredients according to their characteristics. Make suggestions as to what I need to do next. Begin to use finishing techniques to make products look good. 	 Describe what went well, thinking about design criteria Talk about existing products considering use, materials, how they work, audience, where they might be used; express personal opinion Talk about what I would do differently if I were to do it again & why. 			
3	 Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for 	 Begin to research others' needs. Show design meets a range of requirements. Describe design using an accurately labelled sketch and words. Make detailed lists of materials or ingredients needed. 	 Independently demonstrate how to work safely or hygienically. Begin to measure, mark out, cut and shape materials/components with some accuracy. Begin to assemble, join and combine materials and components with some accuracy. Begin to apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Begin to understand and use mechanical systems in their products. Begin to understand and apply the principles of a healthy & varied diet. Begin to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. 	 Use design criteria to evaluate finished product. Identify what you would change to make design better. Begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose Learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products 			
4	 example, gears, pulleys, cams, levers and linkages] Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] (Y5 & 6) Apply their 	 Begin to create own design criteria. Suggest improvements for design. Make and explain design decisions considering availability of resources. 	 Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand and use mechanical systems in their products. Understand and apply the principles of a healthy & varied diet. Begin to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. 	 Use criteria to evaluate product. Begin to explain how I could improve original design. Discuss by whom, when and where products were designed Research whether products can be recycled or reused. Know about some inventors/designers/ engineers/chefs/manufacturers of ground-breaking products 			
5	understanding of computing to program , monitor and control their products. (Y5 & 6) • Cooking & Nutrition: 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.	 Use internet & questionnaires for research & design ideas. Create own design criteria. Produce a logical, realistic plan & explain it to others. Make design decisions considering time & resources. Use computer-aided designs. 	 Confidently apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Confidently understand and use mechanical systems in their products. Begin to understand and use electrical systems in their products. Begin to apply their understanding of computing to program, monitor and control their products. Confidently 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. 	 Evaluate ideas & finished product against specification, considering purpose and appearance. Test and evaluate final product. Research how sustainable materials are. Talk about some key inventors/designers/ engineers/ chefs/manufacturers of ground- breaking products 			
6	 Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. 	 Draw on market research to inform design & identify features of design that will appeal to the intended user. Follow & refine a logical plan. Make design decisions, considering, resources & cost. 	 Confidently apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Confidently understand and use mechanical systems in their products. Understand and use electrical systems in their products. Apply their understanding of computing to program, monitor and control their products. Confidently 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, caught and processed. 	 Write a detailed evaluation of own ideas and products against design criteria using technical language. Begin to compare and appraise own products against those created by peers. 			