Wheldrake with Thorganby CE Primary School Progression of Skills in SUBJECT Coverage of skills – Working together to be the best we can be

To be updated to align with the Kapow scheme



	Reception	<u>Year</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
National curriculum Technological Knowledge / Mechanisms	EYFS: "To select tools and techniques needed to shape, assemble and join materials they are using."	how they can be made stronger, stiffer and more stable DT1/1.4b explore and use mechanisms, in their products. KS1: "To explore and use mechanisms e.g. levers, wheels and axels in their		DT2/1.4a apply their understanding of how to strengthen, stiffen and reinforce more complex structures DT2/1.4b understand and use mechanical systems in their products DT2/1.4c understand and use electrical systems in their products DT2/1.4d apply their understanding of computing to programme, monitor and control their products KS2: "To understand and use mechanical systems e.g. gears, pulleys and			
Technological Knowledge / Mechanisms Progression		Year 1: With some support, begin to explore and use simple mechanisms. For example, use sliders in moving pictures, hinges into models etc	Year 2: With some independence explore and use winding mechanisms. Begin to incorporate wheels and axles into their products.	linkages in their pro- Year 3: Begin to develop an understanding that mechanical systems such as levers and linkages or pneumatic systems can create movement. Begin to incorporate levers and linkages into their products.	Year 4: With increasing independence produce models that incorporate mechanical systems such as levers, linkages or pneumatic systems to create movement.	Year 5: Begin to understand how mechanical systems such as cams create movement. Design and make a product that incorporates a cam mechanism.	Year 6: Develop a greater understanding of how cams, pulleys or gears create movement. Create and use prototypes. Design and make products with greater independence.

Ongoing	Work on their own and collaboratively with others on projects in 2 and 3 dimensions Use ICT Investigate different kinds of art, craft and design.	Work on their own and collaboratively with others on projects in 2 and 3 dimensions Use ICT Investigate different kinds of art, craft and design.	Work on their own and collaboratively with others on projects in 2 and 3 dimensions and on different scales. Use ICT -Investigate art, craft and design in the locality and in a variety of genres, styles and traditions.	-Work on their own and collaboratively with others on projects in 2 and 3 dimensions and on different scalesUse ICT -Investigate art, craft and design in the locality and in a variety of genres, styles and traditions.	-Work on their own and collaboratively with others on projects in 2 and 3 dimensions and on different scalesUse ICT -Investigate art, craft and design in the locality and in a variety of genres, styles and traditions.	-Work on their own and collaboratively with others on projects in 2 and 3 dimensions and on different scalesUse ICT -Investigate art, craft and design in the locality and in a variety of genres, styles and traditions.
Autumn 1	Y1-Pirates Food focus Developing, planning and communicating ideas. Draw on their own experience to help generate ideas Suggest ideas and explain what they are going to do Identify a target group for what they intend to design and make Working with tools, equipment, materials and components to make quality products (incfood) Select and use appropriate fruit and vegetables, processes and tools Use basic food handling, hygienic practices and personal hygiene Use simple	Y2-Pirates Paddy's lunch box Developing, planning and communicating ideas. Generate ideas by drawing on their own and other people's experiences Develop their design ideas through discussion, observation, drawing and modelling Identify a purpose for what they intend to design and make Identify simple	Y3-Anglo Saxons and Vikings-Britain until 1066	Y4- Anglo Saxons and Vikings-Britain until 1066	Y5-Brazil	Y6-Brazil

<u> </u>		 	1
	techniques to design criteria		
	the appearance Make simple		
of their p			
	ng processes and parts		
products	5 `		
	e their product		
	ssing now well it		
l l	Telation to the		
	Evaluate tileli		
	as tiley are		
	ed, identifying s and possible products Begin to		
	they might make select tools and		
	their product by materials; use		
	uestions about vocab' to name		
	ey have made and describe them		
	they have gone Measure, cut and		
about it	score with some		
	accuracy Use		
	hand tools safely		
	and appropriately		
	Assemble, join and		
	combine materials		
	in order to make a		
	product Choose		
	and use		
	appropriate		
	finishing		
	techniques		
	Evaluating processes		
	and products		
	Evaluate against		
	their design criteria		
	Evaluate their		
	products as they are		
	developed,		
	identifying strengths		
	and possible		
	changes they might		

Autumn 2	Y1-Space & Beyond/ Celebrate	make Talk about their ideas, saying what they like and dislike about them Y2-Space & Beyond/ Celebrate	Y3- Christmas	Y4-Christmas	Y5-Tudors	Y6-Tudors Money Pouch
	Make a Christmas decoration. Learn to thread a needle. Sew a pre- punched felt decoration	Make a Christmas decoration. Practise threading a needle. Sew a felt decoration	Investigate art, craft and design in the locality and in a variety of genres, styles and traditions. Sew using a range of different stitches, weave and knit Measure, tape or pin, cut and join fabric with some accuracy	Investigate art, craft and design in the locality and in a variety of genres, styles and traditions. Sew using a range of different stitches, weave and knit Measure, tape or pin, cut and join fabric with some accuracy	Developing, planning and communicating ideas.Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT when	Developing, planning and communicating ideas. Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT when developing design ideas

						developing design ideas Working with tools, equipment, materials and components to make quality products Select appropriate materials, tools and techniques Measure and mark out accurately Use skills in using different tools and equipment safely and accurately Cut and join with accuracy to ensure a good-quality finish to the product Evaluating processes and products Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others	Working with tools, equipment, materials and components to make quality products Select appropriate materials, tools and techniques Evaluating processes and products Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others
Spring 1	R-Recycling/ Chinese New Year	Y1-GF of L Structures: Windmill for Thomas Fariner's flour. Developing, planning and communicating ideas. Draw on their own experience to help generate ideas Suggest	Y2-GF of L Structures: Windmill for Thomas Fariner's flour. Developing, planning and communicating ideas.	Y3- Animals and Living Things	Y4-Animals and living things	<u>Y5-Journeys</u>	Y6-Journeys

ī			1		
	ideas and explain what	Generate ideas by			
	they are going to do	drawing on their			
	Identify a target group	own and other			
	for what they intend to	people's			
	design and make Model				
	their ideas in card and	experiences			
	paper Develop their	Develop their			
	design ideas applying	design ideas			
	findings from their	through			
	earlier research	discussion,			
		observation ,			
	Working with tools,	•			
	equipment, materials	drawing and			
	and components to	modelling Identify			
	make quality products	a purpose for what			
	(incfood)	they intend to			
	Make their design using	design and make			
	appropriate techniques	Identify simple			
	With help measure, mark	design criteria			
	out, cut and shape a	Make simple			
	range of materials Use	•			
	tools eg scissors and a	drawings and label			
	hole punch safely	parts			
	Assemble, join and				
	combine materials and	Working with tools,			
		equipment,			
	components together	materials and			
	using a variety of	components to			
	temporary methods e.g.	make quality			
	glues or masking tape	products Begin to			
	Use simple finishing	select tools and			
	techniques to improve	materials; use			
	the appearance of their	vocab' to name			
	product				
	Evaluating processes and	and describe them			
	products	Evaluating processes			
	Evaluate their product	and products			
	by discussing how well it	Evaluate against			
	works in relation to the	their design criteria			
	purpose Evaluate their	Evaluate their			
	products as they are	products as they are			
	 			-	

		developed, identifying strengths and possible changes they might make Evaluate their product by asking questions about what they have made and how they have gone about it	developed, identifying strengths and possible changes they might make Talk about their ideas, saying what they like and dislike about them				
Spring 2	R-Animals hot and cold (the world's habitats)/Easter	Y1-Ponds, Bogs & Woods	Y2-Ponds, Bogs & Woods	Y3-Mountains, Rivers and Coasts	Y4-Mountains, Rivers and Coasts	<u>Y5-Natural</u> <u>Disasters</u>	Y6-Natural Disaster
Summer 1	R-Farming Planting	Y1-Plants	Y2-Plants	Y3- Living things and habitats	Animal shelters Developing, planning and communicating ideas Generate ideas, considering the purposes for which they are designing Make labelled drawings from different views showing specific features Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and	Olympic Food for Athletes Developing, planning and communicating ideas. Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use	V6- Ancient Greece and Olympics Olympic Food for Athletes Developing, planning and communicating ideas. Communicate their ideas through detailed labelled drawings Develop a design specification Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways Plan the order of their work, choosing appropriate

			1			
				suggesting	materials,	materials, tools and
				alternative methods	equipment and	techniques
				of making, if the first	processes, and	
				attempts fail	suggesting	Working with tools,
				Evaluate products	alternative	equipment,
				and identify criteria		materials and
				that can be used for	methods of making	components to make
				their own designs	if the first attempts	quality products
					fail Use results of	Select appropriate
				Working with tools,	investigations,	tools and techniques
				equipment,	information	Use tools safely and
				materials and	sources, including	accurately.
				components to	ICT when	(Y5objectives): Weigh
				make quality		and measure
				products (incfood	developing design	accurately (time, dry
				Select appropriate	ideas	ingredients, liquids)
				tools and techniques		Apply the rules for
				for making their	Working with tools,	basic food hygiene
				product Measure,	equipment,	and other safe
				mark out, cut and	materials and	practices e.g. hazards
				shape a range of	components to	relating to the use of
				materials, using	make quality	ovens
				appropriate tools,	products	
				equipment and	Select appropriate	Evaluating processes
				techniques Join and	materials, tools and	and products
				combine materials	techniques	Evaluate their
				and components	Weigh and measure	products, identifying
				accurately in	accurately (time, dry	strengths and areas
				temporary and	ingredients, liquids)	for development,
				permanent ways	Apply the rules for	and carrying out
				,	basic food hygiene	appropriate tests
				Use simple graphical	and other safe	Record their
				communication	practices e.g. hazards	evaluations using
				techniques	relating to the use of	drawings with labels
				71	ovens	Evaluate against their
				Evaluating processes	Evaluating processes	original criteria and
				and products	and products	suggest ways that
				Evaluate their work	Evaluate a product	their product could
				both during and at	against the original	be improved
				the end of the	design specification	
				assignment Evaluate	Evaluate it personally	
1	ı					

					their products carrying out appropriate tests	and seek evaluation from others	
Summer 2	R-Ourselves/	Y1- Where in the	Y2-Where in the	Y3- Ancient Egypt	Y4- Ancient Egypt	As above	As above
	People who help	<u>World</u>	<u>World</u>				
	<u>us</u>		Moving picture -				
		Moving picture -	sliders and levers				
		sliders and levers					
			Make their design				
		Make their design using	using appropriate				
		appropriate techniques	techniques With help measure, mark				
		With help measure, mark out, cut and shape a	out, cut and shape a				
		range of materials Use	range of materials				
		tools eg scissors and a	Use tools eg scissors				
		hole punch safely	and a hole punch				
		Assemble, join and	safely Assemble,				
		combine materials and	join and combine				
		components together	materials and				
		using a variety of	components				
		temporary methods e.g.	together using a				
		glues or masking tape	variety of temporary				
			methods e.g. glues or masking tape				