## Curriculum drivers

The curriculum is underpinned by the school's Curriculum Drivers: Knowledge, Skills, Community and Self. The spiritual, moral, social and cultural development of our pupils and their understanding of the core values of our society are woven through the curriculum.

Topic Title Year A	Toy Story	The Great Fire of London	Pets at Home	People who help us	Treasure	Amazing Australia!
Design and Technology	Design and make a toy vehicle Design§ 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 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 and ingredients, according to their characteristics Evaluate§ explore and evaluate a range of existing products§ evaluate their ideas and products against design criteria 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.		Building a run for a namster Design§ 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 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 and ingredients, according to their characteristics Evaluate§ explore and evaluate a range of existing products§ evaluate their ideas and products against design criteria 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.		Design and make own pirate flag (textiles) Making a lunch for a pirate Making sandwiches Biscuits in different shapes? Make link with Art Design§ 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 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 and ingredients, according to their characteristics Evaluate § explore and evaluate a range of existing products§ evaluate their ideas and products against design criteria Technical knowledge § build structures, exploring how they	
					can be made stronger, still fer and	

		more stables explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. Food Use the basic principles of a healthy and varied diet to prepare dishes. Understand where food comes from.	
Focus on the use of wheels and	Focus on making things stronger	Autorials - Cut materials safely	
axles	stiffer and more stable	using tools provided.	
	Materials - Cut materials safely	Materials - Measure and mark	
Materials - Cut materials safely	using tools provided.	out to the nearest centimetre.	
using tools provided.	Aterials - Measure and mark	🛛 Materials - Demonstrate a range	
Aterials - Measure and mark	out to the nearest centimetre.	of cutting and shaping techniques	
out to the nearest centimetre.	🛛 Materials - Demonstrate a range	(such as tearing, cutting, folding	
🛛 Materials - Demonstrate a range	of cutting and shaping techniques	and curling).	
of cutting and shaping techniques	(such as tearing, cutting, folding	Materials - Demonstrate a range	
(such as tearing, cutting, folding	and curling).	of joining techniques (such as	
and curling).	Materials - Demonstrate a range	gluing, using hinges or combining	
Materials - Demonstrate a range	of joining techniques (such as	materials to strengthen).	
of joining techniques (such as	gluing, using hinges or combining	Textiles - Shape textiles using	
gluing, using hinges or combining	materials to strengthen).	templates.	
materials to strengthen).	Construction - Use materials to	Textiles - Join textiles using	
Construction - Use materials to	practise drilling, screwing, gluing	running stitch.	
practise drilling, screwing, gluing	and nailing materials to make	Textiles - Colour and decorate	
and nailing materials to make	products (such as wheeled	textiles using a number of	
products (such as wheeled	vehicles).	techniques (such as dyeing, adding	
vehicles).	Design and Make	sequins or printing).	
Design and Make	Design products that have a	Design and Make	
Design products that have a	clear purpose and an intended	Design products that have a	
clear purpose and an intended	user.	clear purpose and an intended	
user.	I make products, refining the	user.	
design of work proceeding	Thermination	design as work proceeded	
Thenination	Explore objects and designs to	Theningtion	
Explore objects and designs to	identify likes and dislikes of the	Explore objects and designs to	
identify likes and dislikes of the	designs	identify likes and dislikes of the	
designs	designs.	designs	
designs.		designs.	

Suggest improvements to existing designs.	Suggest improvements to         existing designs.	<ul> <li>Suggest improvements to existing designs.</li> <li>Cut, peel or grate ingredients safely and hygienically.</li> <li>Measure or weigh using measuring cups or electronic scales.</li> </ul>
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Topic Title Year B	Ghastly events	Extreme Weather	Royal Party Time!	How does your garden grow?	Amazing Africa! Kenya	Sailing across the sea
Design and Technology		Lever book – based on different types of weather Levers and winding mechanisms Share books with other chn Design § 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	Design, make and evaluate products that can be used at the Royal Party Invite people to the party - Governors/local VIPs? Make link with Art Depends on what the chn decide to make. This could cover food, textiles (bunting/banners) or construction.		1 or 2 lessons for Art and the n mainly focus on D&T Finger puppet of an African animal Design * 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 Make * select from and use a range	Seaside snacks/ Prepare a lunch for the Lighthouse keeper Fruit kebab Pastry wheel use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from. Design design purposeful, functional, appealing products for
		Make § select from and use a range of tools and			of tools and equipment to perform practical tasks [for	menserves and other

	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 <b>Evaluate</b> § explore and evaluate a range of existing products§ evaluate their ideas and products against design criteria <b>Technical knowledge</b> § build structures, exploring how they can be made stronger, stiffer and more stable§ explore and use mechanisms [for example, <b>levers</b> , <b>sliders</b> , wheels and axles], in their products.		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 Evaluate § explore and evaluate a range of existing products * evaluate their ideas and products against design criteria	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 Make § select from and use a wide range of materials and components, including construction materials, textiles and <b>ingredients</b> , according to their characteristics Evaluate * explore and evaluate a range of existing products * evaluate their ideas and products against design criteria
	<ul> <li>Mechanics - Create products using levers and winding mechanisms.</li> <li>Materials - Cut materials safely using tools provided.</li> </ul>	Design and Make Design products that have a clear purpose and an intended user. Make products, refining the design as work progresses.	<ul> <li>Materials - Cut materials safely using tools provided.</li> <li>Materials - Measure and mark out to the nearest centimetre.</li> <li>Materials - Demonstrate a range of cutting and shaping</li> </ul>	<ul> <li>Food - Cut, peel or grate ingredients safely and hygienically.</li> <li>Design and Make</li> <li>Design products that have a clear</li> </ul>

		<ul> <li>Materials - Measure and mark out to the nearest centimetre.</li> <li>Materials - Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).</li> <li>Materials - Demonstrate a range of joining techniques (such as gluing, using hinges or combining materials to strengthen).</li> <li>Construction - Use materials to practise drilling, screwing, gluing and nailing materials to make products (such as wheeled vehicles).</li> <li>Design and Make</li> <li>Design products that have a clear purpose and an intended user.</li> <li>Make products, refining the design as work progresses.</li> <li>Create products using levers and winding mechanisms.</li> <li>Inspiration</li> <li>Explore objects and designs to identify likes and dislikes of the designs.</li> <li>Suggest improvements to existing designs.</li> </ul>	Inspiration Explore objects and designs to identify likes and dislikes of the designs. Suggest improvements to existing designs. Other skills will depend on what the chn decide to do (Food/textiles) Food - Cut, peel or grate ingredients safely and hygienically. Food - Measure or weigh using measuring cups or electronic scales. Textiles - Shape textiles using templates. Textiles - Join textiles using running stitch. Textiles - Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing).		<ul> <li>techniques (such as tearing, cutting, folding and curling).</li> <li>Materials - Demonstrate a range of joining techniques (such as gluing, using hinges or combining materials to strengthen).</li> <li>Textiles - Shape textiles using templates.</li> <li>Textiles - Join textiles using running stitch.</li> <li>Textiles - Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing).</li> <li>Design and Make</li> <li>Design products that have a clear purpose and an intended user.</li> <li>Make products, refining the design as work progresses.</li> <li>Inspiration</li> <li>Explore objects and designs to identify likes and dislikes of the designs.</li> <li>Suggest improvements to existing designs.</li> </ul>	purpose and an intended user. Aake products, refining the design as work progresses. Inspiration Explore objects and designs to identify likes and dislikes of the designs. Suggest improvements to existing designs.
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Electrical and electronics - Diagnose faults in battery- operated devices (such as low battery, water damage or battery terminal damage). This key indicator has not been covered in the above long-term plans - electrical systems are not specifically mentioned in the KS1 Curriculum.

This could be discussed when using the Beebots if they are not working or when you are exploring a range of existing products.

Topic Title	<b>Ooh La La!</b> Europe - Focus on France	Remarkable Romans	Sound?	Food Glorious Food	Anglo-Saxons and Scots	What's beneath my feet? Rocks and Fossils
Design and Technology	Tie in with 'French Day' Therefore a one-off session. <u>Make a (Link with</u> <u>the European country- France)</u> Make a quiche Process of making pastry. (2021 – flamiche) § 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	Investigate the use of columns and arches. Make a stand to display Roman bust. Technical knowledge apply their understanding of how to strengthen, stiffen and reinforce more complex structures	Make own instruments which can change in volume and pitch. Invite other classes to watch a piece of music/show instruments to Look at the history of Fendor guitars?	Seasonal food Summer. Cooking and nutrition Packaging Bread - Warburtons 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		

Food - Prepare ingredients hygienically using appropriate	Materials - Cut     materials accurately     and safely by	Acterials - Cut materials accurately and safely by selecting appropriate tools.	Food - Prepare ingredients hygienically using appropriate utensils.	
L Food - Prepare ingredients hygienically using appropriate utensils. D Food - Measure ingredients to the nearest gram accurately.	L Materials - Cut materials accurately and safely by selecting appropriate tools. D Materials - Measure and mark out to the nearest millimetre. Materials - Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut-outs). Materials - Select appropriate joining techniques. Materials - Select appropriate joining techniques. I Identify some of the great designers in all of the areas of study (including pioneers in heatignights)	<ul> <li>Materials - Cut materials accurately and safely by selecting appropriate tools.</li> <li>Materials - Measure and mark out to the nearest millimetre.</li> <li>Materials - Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut-outs).</li> <li>Materials - Select appropriate joining techniques.</li> <li>Construction - Choose suitable techniques to construct products or to repair items.</li> <li>Design and Make</li> <li>Design with purpose by identifying opportunities to design.</li> <li>Make products by working efficiently (such as by accefully aclasting</li> </ul>	<ul> <li>L Food - Prepare ingredients hygienically using appropriate utensils.</li> <li>Food - Measure ingredients to the nearest gram accurately.</li> <li>I Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.</li> <li>Design and Make</li> <li>Design with purpose by identifying opportunities to design.</li> <li>Improve upon existing designs, giving reasons for choices.</li> </ul>	
	horticultural techniques) to generate ideas for designs.	carefully selecting materials). Refine work and techniques as work progresses, continually evaluating the product design. Improve upon existing designs, giving reasons for choices.		

		Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.			
Design use research and deve groups§ generate, develop, mo pieces and computer-aided de <u>Make</u> select from and use a wi of materials and components, <u>Evaluate</u> investigate and analy improve their work§ understan <u>Technical knowledge</u> apply to products [for example, gears, p program, monitor and control	elop design criteria to inform odel and communicate their sign ider range of tools and equi including construction mate yse a range of existing proc d how key events and indiv their understanding of how pulleys, cams, levers and lir <b>ol their products.</b>	n the design of innovative, functional r ideas through discussion, annotate ipment to perform practical tasks [for erials, textiles and ingredients, accord ducts§ evaluate their ideas and produ- riduals in design and technology hav to strengthen, stiffen and reinforce n nkages]§ understand and use electri	I, appealing products that are fit fo d sketches, cross-sectional and ex r example, cutting, shaping], acc ding to their functional properties a ucts against their own design crite re helped shape the world nore complex structures understa cal systems in their products §app	r purpose, aimed a xploded diagrams, and aesthetic qualit ria and consider the and and use mecha oly their understar	at particular individuals or prototypes, pattern n and use a wider range ties e views of others to anical systems in their nding of computing to

Topic Title	Stone Age -Iron age	Extreme Survival!	Journey to Ancient Egypt	United Kingdom	Eastern Europe
Design and Technology	Share time with Art Night light (fits in with Science) (Crumble - night light) apply their understanding of computing to program, monitor and control their products. https://redfernelectronics.co.uk/project s/sparkle-nightlight-project/ Anglepoise lamp – G. Carwardine	Making a winter hat select from and use a wider range of materials and components, including construction materials, <b>textiles</b> and ingredients, according to their functional properties and aesthetic qualities Chanel – hat designer	Make a shaduf (levers). And/or make paper (as they did from papyrus) understand and use mechanical systems in their products [for example, gears, <b>pulleys</b> , cams, <b>levers</b> and linkages	Share time with Art Healthy and varied diet Look at Jamie Oliver and Healthy School Meals https://www.jamieol iver.com/features/6- healthy-school- snacks/	Food from Eastern European country – Food – one off session ? Vatrushka – Russian ring- shaped pastry

			Healthy after school	Sharlotka –
			snacks	Russian apple
			Sweet potato	pie
			muffins	Bohemian
			Granola bars	kolaches
			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	Khachapuri – cheese pies
			caught and processed	
<ul> <li>Electricals and electronics - Create series and parallel circuits.</li> <li>Materials - Cut materials accurately and safely by selecting appropriate tools.</li> <li>Materials - Measure and mark out to the nearest millimetre.</li> <li>Materials - Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut-outs).</li> <li>Materials - Select appropriate joining techniques.</li> <li>Construction - Choose suitable techniques to construct products or to repair items.</li> <li>Design with purpose by identifying opportunities to design.</li> <li>Make products by working efficiently (such as by carefully selecting materials).</li> <li>Refine work and techniques as work progresses, continually evaluating the</li> </ul>	<ul> <li>Textiles - Understand the need for a seam allowance.</li> <li>Textiles - Join textiles with appropriate stitching.</li> <li>Textiles - Select the most appropriate techniques to decorate textiles.</li> <li>Identify some of the great designers in all of the areas of study to generate ideas for designs.</li> <li>Improve upon existing designs, giving reasons for choices.</li> <li>Design with purpose by identifying opportunities to design.</li> <li>Make products by working efficiently (such as by carefully selecting materials).</li> <li>Refine work and techniques as work progresses, continually evaluating the product design.</li> </ul>	<ul> <li>Construction - Choose suitable techniques to construct products or to repair items.</li> <li>Mechanics - Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).</li> <li>Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.</li> </ul>	<ul> <li>Food - Prepare ingredients hygienically using appropriate utensils.</li> <li>Food - Measure ingredients to the nearest gram accurately.</li> <li>Design and Make</li> <li>Design with purpose by identifying opportunities to design.</li> <li>Make products by working efficiently (such as by</li> </ul>	

Improve upon existing designs, giving reasons for choices. I Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.	Improve upon existing designs, giving reasons for choices. Design with purpose by identifying opportunities to design. Make products by working efficiently (such as by carefully selecting materials). Refine work and techniques as work progresses, continually evaluating the product design. Materials - Cut materials accurately and safely by selecting appropriate tools. Materials - Measure and mark out to the nearest millimetre. Materials - Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut-outs). Materials - Select appropriate joining techniques.	carefully selecting materials). Refine work and techniques as work progresses, continually evaluating the product design. Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.	

**Design** 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, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping...], accuratelys 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

**Evaluate** investigate and analyse a range of existing products valuate 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

Technical knowledge 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] understand and use electrical systems in their products **sapply their understanding of computing to program, monitor and control their products**.

<b>Topic Title</b> Year A	Aspect or theme beyon	Riotous Royalty nd 1066 - changing powers of monarchs (Henry VIII) ueen Victoria - Victorians?	Around the world in 80 days	Victorious Vikings Viking and Anglo Saxon	Shaking and exploding Earthquake, zones and volcanoes	Local study - Gillingham /SP How we are linked
Design and Technology	Art	Crumble – Royal portraits with moving eyes? apply their understanding of computing to program, monitor and control their products. https://redfernelectronics.co.uk/projects/moving- eyes-project/ Research local link/parent skills with electronics/computing and invite in.	Art	Art	Building a structure - withstand an earthquake Look at designers and buildings in countries where Earthquakes often happen. What ideas can they make use of in their own designs?	(1 or 2 sessions on Art) Food - savoury dishes - where ingredients are grown/reared Shepherd's Pie 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

Construction - Develop a range of practical skills to create		Materials - Cut materials	Food - Understand the
products and repair items (such as cutting, drilling and		with precision and refine	importance of correct
screwing, nailing, gluing, filling and sanding).		the finish with appropriate	storage and handling of
Mechanics - (recapping slider/lever)		tools (such as sanding wood	ingredients (using
Mechanics - Use innovative combinations of electronics		after cutting or a more	knowledge of micro-
(or computing) and mechanics in product designs.		precise scissor cut after	organisms).
Materials - Cut materials with precision and refine the		roughly cutting out a	Food - Measure
finish with appropriate tools (such as sanding wood after		shape).	accurately and calculate
cutting or a more precise scissor cut after roughly cutting out		🛛 Materials - Show an	ratios of ingredients to
a shape).		understanding of the	scale up or down from a
Materials - Show an understanding of the qualities of		qualities of materials to	recipe.
materials to choose appropriate tools to cut and shape (such		choose appropriate tools to	🛛 Food - Demonstrate a
as the nature of fabric may require sharper scissors than		cut and shape (such as the	range of baking and
would be used to cut paper).		nature of fabric may	cooking techniques.
Make products through stages of prototypes, making		require sharper scissors	Food - Create and
continual refinements.		than would be used to cut	refine recipes, including
Ensure products have a high- quality finish, using art skills		paper).	ingredients, methods,
where appropriate.		Construction - Develop a	cooking times and
Evaluate the design of products so as to suggest		range of practical skills to	temperatures.
improvement to the user experience.		create products and repair	Combine elements of
		items (such as cutting,	design from a range of
		drilling and screwing,	inspirational designers
		nailing, gluing, filling and	throughout history,
		sanding).	giving reasons for
		Combine elements of	choices.
		design from a range of	Create innovative
		inspirational designers	designs that improve
		throughout history, giving	upon existing products.
		reasons for choices.	Evaluate the design of
		Create innovative designs	products so as to
		that improve upon existing	suggest improvement to
		products.	the user experience.
		Evaluate the design of	Design with the user in
		products so as to suggest	mind, motivated by the
		improvement to the user	service a product will
		experience.	offer (rather than
		Make products through	simply for profit).
		stages of prototypes,	

		making continual refinements. Ensure products have a high- quality finish, using art skills where appropriate. Design with the user in mind, motivated by the service a product will offe (rather than simply for profit).	•
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Design 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, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

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Evaluate 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 works understand how key events and individuals in design and technology have helped shape the world

Technical knowledge 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] understand and use electrical systems in their products sapply their understanding of computing to program, monitor and control their products.

Topic Title Year B	To infinity and beyond - Science heavy	Aspect or theme beyond 1066 - significant turning point in British History - WWI / WWII Battle of Britain	Mayans	Vanishing Rainforests -Link to Kenya	Ancient Greeks	A local history study -Shaftesbury - Gold Hill/St Peter's Church/The Abbey
Design and Technology	Orbiting planets – Crumble project Link with Science. Create a model to show how the moon orbits the Earth/Earth orbits the sun. apply their understanding of computing to program, monitor and control their products. Adapt Santa project and replace with moon/Earth. https://redfernelectronics.co.uk/ projects/spinning-santa/ Invite classes to view their work and explain what they have done.	Art	Art	Moving rainforest animals with cams <u>Moving animals with cams</u> <u>understand and use</u> mechanical systems in their products [for example, gears, pulleys, cams, levers and inkages Look at the history and past designers of mechanical wooden toys. Invite other classes to come and see their toys.	Art	Textiles-sewing - tapestry Dorset buttons Creating a 'tapestry/patchwork blanket' to reflect the history of the local area. Look at Shaftesbury button makers.

Construction - Develop a range of		Mechanics - Convert rotary	Textiles - Join textiles
practical skills to create products		motion to linear using cams.	with a combination of
and repair items (such as cutting,		Aterials - Cut materials	stitching techniques
drilling and screwing, nailing, gluing,		with precision and refine	(such as back stitch for
filling and sanding).		the finish with appropriate	seams and running stitch
A Mechanics - Use innovative		tools (such as sanding wood	to attach decoration).
combinations of electronics (or		after cutting or a more	] Textiles - Use the
computing) and mechanics in		precise scissor cut after	gualities of materials to
product designs.		, roughly cutting out a	create suitable visual
Use of a pivot.		shape).	and tactile effects in
Materials - Cut materials with		🛛 Materials - Show an	the decoration of
precision and refine the finish with		understanding of the	textiles (such as a soft
appropriate tools (such as sanding		gualities of materials to	decoration for comfort
wood after cutting or a more		choose	on a cushion).
precise scissor cut after roughly		appropriate tools to cut	Combine elements of
cutting out a shape).		and shape (such as the	design from a range of
Aterials - Show an understanding		nature of fabric may	inspirational designers
of the qualities of materials to		require sharper scissors	throughout history,
choose appropriate tools to cut and		than would be used to cut	giving reasons for
shape (such as the nature of fabric		paper).	choices.
may require sharper scissors than		Construction - Develop a	Evaluate the design of
would be used to cut paper).		range of practical skills to	products so as to
Make products through stages of		create products and repair	suggest improvement to
prototypes, making continual		items (such as cutting,	the user experience.
refinements.		drilling and screwing,	
Ensure products have a high-		nailing, gluing, filling and	
quality finish, using art skills where		sanding).	
appropriate.		Design with the user in	
Evaluate the design of products so		mind, motivated by the	
as to suggest improvement to the		service a product will offer	
user experience.		(rather than simply for	
		profit).	
		Make products through	
		stages of prototypes,	
		making continual	
		refinements.	
		Ensure products have a	
		high- quality finish, using	
		art skills where appropriate.	

	<ul> <li>Create innovative designs that improve upon existing products.</li> <li>Evaluate the design of products so as to suggest improvement to the user experience.</li> <li>Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.</li> </ul>	
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**Design** 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, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping...], 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 Evaluate 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

Technical knowledge 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] understand and use electrical systems in their products sapply their understanding of computing to program, monitor and control their products.