	EYFS	Key Stage 1	Lower Key Stage 2 Upper Key Stage 2
Thread	 Early Learning Goal: <u>Technology:</u> Recognise a range of technology is used in places such as homes and schools 	 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. 	 <u>Design</u> 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 <u>Make</u>
	 Expressive arts and design Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. 	 communication technology <u>Make</u> 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 Explore and evaluate a range of activities and holds 	 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 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
	 Being imaginative Use what they have learnt about media and materials in original ways, thinking about uses and purposes. 	 existing products. Evaluate their ideas and products against design criteria <u>Technical knowledge</u> 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. 	 <u>Technical knowledge</u> 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 [for example, series circuits incorporating switches, bulbs, buzzers and motors] Apply their understanding of computing to program, monitor and control their products.

	 Represent own ideas, thoughts and feelings through design and technology. Health and self-care Understand the importance of a healthy diet Talk about ways to keep healthy and safe. 	Cooking and nutritic Use basic pr and varied d dishes.		 <u>Cooking and nutrition</u> Understand and apply the principles of a healthy and varied diet (Covered in PSHE) Prepare and cook and 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. 				
	EYFS	Year 1	ear 1 Year 2 Year 2		Year 4	Year 5	Year 6	
Developing, planning and communica ting ideas.	 Explain what they are making and which materials they are using. Select materials from a limited range that will meet a simple design criteria e.g shiny Selected and name the tools needed to work the 	 Begin to draw on their own experience to help generate ideas and research conducted on criteria. Begin to understand the development of existing products. Explain what 	 Generate ideas based on simple design criteria and their own experiences, explaining what they could make. Develop, model and communicat e their ideas through talking, mock- ups 	 Develop and communicat e ideas. Start to order the main stages of making a product. Understand how well made products have been designed, made, what materials have been 	 Generate and clarify ideas through discussion with peers to develop design of products that are fit for purpose, aimed at particular individuals or groups. Use annotated sketches and 	 Start to generate, develop, model and communicat e their ideas through discussion, annotated sketches, cross sectional and exploded diagrams, prototypes, pattern 	 Start to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional and exploded diagrams, prototypes, pattern 	

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materials e.g	they are for,	and	used and the	appropriate	pieces and	pieces and
scissors for	how they	drawings.	construction	information	CAD.	CAD.
paper	work, what	 Develop 	technique.	and	 Generate 	 Use research
 Explore ideas 	materials	their ideas	 Learn about 	communicatio	innovative	using surveys,
by rearranging	have been	through talk	inventors,	n technology,	ideas	interviews,
materials	used.	and	designers,	such as web-	through	questionnaire
 Describe 	 Start to 	drawings	engineers,	based recipes,	research	and web
simple models	suggest ideas	and labelled	chefs and	to develop	including	based
or drawing of	and explain	parts.	manufacture	and	surveys,	resources, to
ideas and	what they	 Make 	rs who have	communicate	interviews	develop a
intentions.	are going to	templates	developed	ideas.	and	design
 Discuss their 	do.	and mock	ground-	 Generate, 	questionnair	specification
work as it	 Design 	ups of their	breaking	develop,	es and	for a range of
progresses	appealing	ideas in card	products.	model and	discussion	functional
	products for	and paper or	 Explain their 	communicate	with peers to	products.
	a particular	using ICT.	choice of	realistic ideas	develop a	 Develop a
	user based	 Begin to 	materials	through	design brief	simple design
	on simple	explain why	and	discussion	and criteria	specification
	design	they chose a	components	and , as	for a design	to guide the
	criteria.	certain	including	appropriate,	specification.	development
	 Generate 	material.	function and	annotated	 Design 	of their ideas
	initial ideas	 Develop 	aesthetics.	sketches,	purposeful,	and products,
	and design	their own	 Put together 	cross	functional,	taking
	criteria	ideas from	a step by	sessional and	appealing	account of
	through own	given	step plan.	exploded	products for	constraints
	experiences.	starting		diagrams.	the intended	including
	 Develop and 	points.		 Develop a 	user that are	time,
	communicate			clear idea of	fit for	resources and
	those ideas			what has to	purpose	cost.
	through talk			be done,	based on a	 Generate and
	and drawings			planning how	simple	develop
	and mock			to use	design	innovative
				materials.	specification	ideas and

Design and recimology i		
ups where	equipment	With growing share and
relevant.	and processes	confidence clarify these
 Make 	and	apply a range through
templates	suggesting	of finishing discussion.
and mock	alternative	techniques, • Communicate
ups of their	methods of	including ideas through
ideas in card	making, if the	those from annotated
and paper or	first attempts	art. sketches,
using ICT.	fail.	Start to pictorial
Communicat	 Identify the 	understand representatio
e with others	strengths and	how much ns.
how they	areas for	products cost Suggest some
want to	development	to make, alternative
construct	in their ideas	how plans and say
their	and products.	sustainable what the
product.	Learn about	and good points
 Explain how 	inventors,	innovative and
they intend	designers,	they are and drawbacks
to fix simple	engineers,	the impact are about
materials.	chefs and	products each.
•	manufacturer	have beyond Show
	s who have	their consideration
	developed	intended to culture and
	ground-	purpose. society in a
	breaking	 Suggest design.
	products.	some • Work within a
	Consider how	alternative given budged.
	to present	plans and say • Suggest ideas
	their product	what the how their
	in an	good points product could
	interesting	and be sold.
	way.	drawbacks

					Produce a	are about	Use market
					plan and	each.	research to
					explain it to	Product a detailed	inform plans.
					others.	step by step plan.	
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		 Select and use 	 Plan by 	 Plan the 	 Order the 	 Produce 	 Formulate a
	 Begin to 	simple	suggesting	main stages	main stages of	detailed lists	step by step
	create their	utensils, tools	what to do	of making.	making.	of equipment	plan to guide
	design using	and	next.	 Select from 	 Select and use 	and fabrics	making,
***	basic	equipment to	 Select and 	and use a	appropriate	relevant to	listing tools,
Working with tools,	techniques.	perform a job	use tools,	range of	tools to	their tasks.	equipment,
equipment,	 Start to build 	e.g peel, cut,	equipment,	appropriate	measure,	 Write a step- 	materials and
materials	structures,	slice, squeeze,	skills and	utensils,	mark out, cut,	by Step plan,	components.
and	joining	grate and	techniques	tools and	score, shape	including a	 Competently
component	components	chop safely.	to perform	equipment	and combine	list of	select from
s to make	together.	 Begin to make 	practical	with some	with some	resources	and use
quality	 Look at 	their design	tasks,	accuracy	accuracy	required.	appropriate
products.	simple hinges,	using	explaining	related to	related to	 Select from 	tools to
-	wheels and	appropriate	their	their	their	and use, a	accurately
	axles.	techniques.	choices.	product.	products.	range of	measure,
	 Use technical 	 Begin to build 	 Select new 	 Select from 	Explain their	appropriate	mark, cut and
	vocabularly	structures,	and old	and use	choice of	utensils,	assemble
	when	exploring how	materials,	finishing	materials	tools and	materials and
	appropriate	they can be	components	techniques	according to	equipment	securely
	 Begin to use 	made	, reclaimed	suitable for	functional	accurately to	connect
	scissors to cut	stronger,	materials	the product	properties	measure and	electrical
	straight and	stiffer and	and	they are	and aesthetic	combine	components
	curved edges	more stable.	construction	creating.	qualities.	appropriate	to produce
	and hole	 Explore and 	kits to build		 Select from 	ingredients,	reliable,
	pinches to	use	and create		and use	materials	functional
	punch holes.	mechanisms	their		materials and	and	products.
	 Explore 	(levers,	products.		components,	resources.	 Use finishing
	using/holding	sliders,			including		and

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 basic tools such as a saw or hammer. Use adhesives to join materials. 	 wheels and axles) in products. With help measure, mark out, cut and shape a range of materials. Begin to assemble, join and combine materials and components together using a variety of temporary methods e.g glues or tape. Make a product which moves. 	 Use simple finishing techniques suitable for the products they are creating. Be able to join things (materials and components) together in different ways. Attach features to a vehicle (e.g axel and wheels). Join fabric using a running stitch, glue and tape. 		ingredients, construction and electrical componenets according to their function and properties.	 Understand how mechanical systems such as cams or pulleys or gears create movement. Make up a prototype first. Measuremen t accurately to ensure that everything is precise. Demonstrate motivation/ perseverance to refine and improve their products. Use a glue gun with supervision. 	 decorative techniques suitable for the product they are designing and making. Understand how mechanical systems such as cams or pulleys or gears create movements. Know how to reinforce and strengthen a 3D framework. Use a craft knife, cutting mats and ruler with supervision. Make decisions and select the most appropriate mechanical
						system for a

			y ,				particular purpose.
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Evaluating	 Say what they like and do not like about items they have made and attempt to say why. Begin to talk about their designs and identify good and bad points Start to talk about changes made during the making process. Discuss how closely their finished products meet their design criteria. 	 Taste, explore and evaluate a range of products to determine the intended user's preferences for the product. Evaluate their ideas throughout and finished products against design criteria, including intended user and purpose and suggest possible changes for next time. When looking at existing products explain what they like and dislike about products and why. 	 Explore a range of existing products and explain what they like and dislike and why. Evaluate their product by discussing how well it works in relation to the purpose the user and whether it meets the original design criteria. 	 Investigate a range of 3-D textile product, ingredients and lever and linkage products relevant to their project. Test their project. Test their product against the original design criteria and with the intended user. Evaluate the ongoing work and the final product with reference to the design criteria and the views of others. Begin to disassemble and evaluate familiar 	 Evaluate their work both during and at the end of the assignment, carrying out appropriate tests. Investigate and evaluate a range of products including the ingredients, materials, components, and techniques that are used. Text and evaluate their own products against design criteria and the intended user and purpose. Evaluate their ideas and products against their ideas and products against their 	 Evaluate their work both during and at the end of the assignment, carrying out appropriate tests. Evaluate how the key designs of individuals in design and technology have helped shape the world. Investigate and analyse products linked to their final product. Compare the final product to the original design specification and record the evaluations 	 Evaluate their work both during and at the end of the assignment, carrying out appropriate tests. Evaluate how the key designs of individuals in design and technology have helped shape the world. Continually evaluate and modify the working features of the products to match the initial design specification. Critically evaluate their products against their design

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				products and consider the views of others to improve them.	 criteria and identify the strengths and areas for improvement in their work. Begin to disassemble and evaluate familiar products and consider the views of others to improve them 	 Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. Consider the views of others to improve their work. 	 specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests. Test the system to demonstrate its effectiveness for the intended user and purpose.
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Food	 Begin to develop a food vocabulary using taste, smell, texture and feel. Explore familiar food products. Stir, spread, knead and shape a range 	 and vegetables Understand and principles of he diet to prepare Plate) Know and use t sensory vocabu Know how to predishes safely an without using a 	d use basic althy and varied dishes (Eatwell echnical and lary. repare simple id hygienically heat source. se techniques such	 equipment and and combine f Know about a processed ingr for their produ they are grown Know and use and sensory vo appropriately. Understand ho cook a variety 	range of fresh and edients appropriate ict, and whether n, reared or caught. relevant technical ocabulary	equipment inc to prepare and Understand at relation to foo source of diffe Know and use and sensory vo Begin to under food and drink substances (nu	oout seasonality in d products and the rent food products. relevant technical

		Design unu i	cennelogy	regression			
	 of food and ingredients. Begin to work safely and hygienically. Measure and weigh food items, non-statutory measures e.g spoons, cups. 	non-statutory n spoons, cups.	eigh food items, neasures e.g om other countries.	 range of tech peeling, chop mixing, sprea baking. Be able to ide come from th counties of th Understand w hygienic and 	vhat to do to be safe. weigh ingredients	ar • U: ec m • Ui te ch	escribe what to do to be hygienic nd safe. se appropriate tools and quipment, weighing and heasuring with scales. nderstand how to use a range of echniques such as peeling, hopping, slicing, grating, mixing, preading, kneading and baking.
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Constructi on and structures.	 Construct with a purpose in mind, using a variety of resources. Build and construct a wide range of objects and adapting their work when necessary. Select the tools and techniques they need to shape, assemble and join materials. Producing items which 	 Know how to ma structures strong more stable. 	ke freestanding er, stiffer and chnical vocabulary	 Develop and us to construct st structures. Develop and us of cubes and cuappropriate, m shapes. 	se knowledge of how rong, stiff shell se knowledge of nets uboids and, where ore complex 3D technical vocabulary	 Und stif fran Knd 	derstand how to strengthen, ifen and reinforce 3D meworks. ow and use technical vocabulary evant to the project.

	represent			
	other objects.			
	EYFS	Year 1 Year 2	Year 3 Year 4	Year 5 Year 6
Textiles (explored through the Art Progressio n)	 Create fabrics by weaving materials i.e. grass through twigs. Enjoy playing with and using a variety of textiles and fabric. Decorate a piece of fabric. Show experience in simple stitch work. Show experience in fabric collage. Use appropriate language to describe colours, media, equipment and textures. Investigating through heuristic play, treasure 	 stapling. Explore different finishing techniques Know and use technical vocabulary. 	 Know how to strengthen, stiffen and reinforce existing fabrics. Understand how to securely join two pieces of fabric together. Understand the need for patterns and seam allowances. Know and use technical vocabulary. 	 Produce a 3D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics. Understand how fabrics can be strengthened, stiffened and reinforces where appropriate. Know and use technical vocabulary.

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	baskets and collections of natural and manufactured resources.						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Mechanism s.	 Ask questions about how things move. Deconstruct moving objects for discussion. 		duce different ent e.g levers, nd axels. chnical vocabulary. wheels, axles and een fixed and	 Understand and use lever and linkage mechanisms. Distinguish between fixed and loose pivots. Know and use technical vocabulary. 		 Understand that mechanical and electrical systems have an input, process and an output. Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. Know and use technical vocabulary. 	
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Electrical systems				coverage. • Apply their uproducts	and use electrical syst inderstanding of comp se technical vocabular	outing to program an	

	Our s	school prog	gression: (Blue= Art/D &	T Combined unit)		
Receptio n	 Forest school Make rubbings to collect Recognise patterns in the Enjoy using stencils to c Create fabrics by weaving Explorative provision Enjoy using stencils to creat Enjoy playing with and u Manipulate malleable m 	ne environment reate a picture. ng materials i.e. grass th te a picture. using a variety of textile	hrough twigs. es and fabric.		It dough. Impress and appl	ly simple decoration.	
	Autumn: All about me		Spring: Heroes and Heroines. Spring: Rumble in the jungle		Summer: Once upon a time.	Summer: under the sea.	
	Diwali lanterns (construction and structures)	Diwali cooking	Mask making	Hand puppets (Textiles)	Junk modelling	Moving pictures (mechanisms)	
	 Learn about the significance of Diwali lanters and what they are used for. Design a Diwali lantern, considering the tools needed. Construct a lantern (with adult help) Add decoration, 	 Learn about food eaten in the Diwali festival. Prepare food using tools Talk about where it was produced / grown. Use senses to talk about 	 Design a hero / heroine mask based on a range of story books Use a range of cutting skills and adhesive skills to join 	 Explore pre existing hand puppets- verbally say likes and dislikes Design puppet- choosing 	 Learn about architects and how they build the world around them. Be given a design brief- a photo of a beach location e.g a seaside town. Design the model 	 Explore models with mechanisms and establish how each one moves different because of the design. Design and verbally say the tools needed. Evaluate finished product against 	

	Design and Technology Progression of Skills EYFS - Y6					
	evaluate final product	 Show opinions about the final product. 	colours chosen etc • Peer assess verbally	 available, considerin g the character they are making. Use simple sewing stitch to attach parts onto the sock. Peer asses Use the socks to tell a story in groups 	 Evaluate and adapt it (with support) Add colour and further detail Evaluate 	
Skills Covered : Mechani sms Textiles Cooking Construc tion and sculpture S	 Construct with a purpose in mind, using a variety of resources. Build and construct a wide range of objects and adapting their work when necessary Select the tools and techniques they need to shape, assemble and join materials. Say what they like and do not like about items they have made 	 Begin to develop a food vocabulary using taste, smell, texture and feel. Explore familiar food products. Stir, spread, knead and shape a range of food and ingredients. Begin to work safely and hygienically. 	 Say what they like and do not like about items they have made and attempt to say why. Begin to talk about their designs and identify good and bad points Use adhesives to join materials. 	 Decorate a piece of fabric. Show experience in simple stitch work. Show experience in fabric collage. Use appropriate language to describe colours, media, 	 Say what they like and do not like about items they have made and attempt to say why. Begin to talk about their designs and identify good and bad points Use adhesives to join materials. Begin to use scissors to cut straight and curved edges and hole 	 Ask questions about how things move. Deconstruct moving objects for discussion. Start to talk about changes made during the making process. Say what they like and do not like about items they have made and attempt to say why. Begin to talk about their designs and

	Des	iyn unu recm	lology i logi			
	 and attempt to say why. Begin to talk about their designs and identify good and bad points Start to build structures, joining components together. Use technical vocabulary when appropriate Begin to use scissors to cut straight and curved edges and hole pinches to punch holes. Use adhesives to join materials. 	 Measure and weigh food items, non- statutory measures e.g spoons, cups. 	 Select materials from a limited range that will meet a simple design criteria e.g shiny Describe simple models or drawing of ideas and intentions. 	 equipment and textures. Say what they like and do not like about items they have made and attempt to say why. Begin to talk about their designs and identify good and bad points Use adhesives to join materials. 	 pinches to punch holes. Explore ideas by rearranging materials Discuss their work as it progresses 	identify good and bad points • Look at simple hinges, wheels and axles.
Year 1	Autumn: Adventurer	s and Explorers	Spring: Once	Upon a time	Summer: Oce	ans and beaches
I cui I	Construction (mixed w	<u>+</u>	Mechanisms: balloon cars (old toys)			oking
	sculptur	re).		× • • •		0
	 Learn about what an ' 'architecture' is. Look at examples of in buildings and discuss of (link to science and ma appropriate). Look at features of the sketch and label featur vocabulary). Introduce the design by for somebody/somether 	nportant UK why they are strong aterials if e school building, res (focus on prief. Design a shelter	 Design a balloon components. 	ween two wheels. car, write a list of e weight and size of vell a vehicle uk/ eo/de	 Ice cream (exploring weighing) Fruit salad (developin 	temperatures for Science, ng skills)

	 considering what would be aesthetically pleasing and strong etc. Make a mock shelter from paper, consider how to add colour and explore applying. Make a mock shelter from clay, explore adding detail. Annotate drawings with improvements in how to make the final structure strong and fitting the design brief. Children can make their final structure out of a choice of materials. 		
Skills Covered : Mechani sms Textiles Cooking Construc tion and sculpture s	 Know how to make freestanding structures stronger, stiffer and more stable. Know and use technical vocabulary relevant to the project. With help measure, mark out, cut and shape a range of materials. Begin to assemble, join and combine materials and components together using a variety of temporary methods e.g glues or tape. Evaluate their finished products against design criteria, including intended user and purpose and suggest possible changes for next time. 	 Understand that different mechanisms produce different types of movement e.g levers, sliders, wheels and axels. Know and use technical vocabulary. Distinguish between fixed and freely moving axles. 	 Know and use technical and sensory vocabulary. Know how to prepare simple dishes safely and hygienically without using a heat source. Know how to use techniques such as cutting, peeling and grating. Measure and weigh food items, non-statutory measures e.g spoons, cups.
Year 2	Autumn: A Bear named Paddington	Spring: Feeding and Exercise (Science topic)	Summer: An Island Home
	Textiles: Peruvian Arpillera Art	Mechanisms	Construction and structures: Paper Mache Islands (DT and Art combined)

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	 Study the tradition of Arpillera Art and provide an opinion on the finishing techniques. Use a template to create two identical shapes to later applique. Introduce design brief, design an Arpillera scene and write a list of materials needed (ideally design on a computer or gather pictures to replicate) Cut out, glue and sew a scene. Annotate in sketchbook improvements to be made, opinions, materials used and colours. Evaluate final product, comparing to the design brief. 	 Design a shoe box scene of an animal feeding e.g a bird moving towards a worm. Learn about how to use an axel, lever and a cotton wheel to make the object move right to left. 	 Use paper mache 	model- adapt designs
Skills Covered : Mechani sms Textiles Cooking Construc tion and sculpture s	 Understand how simple 3D textile products are made, using a template to create two identical shapes. Understand how to join fabrics using different techniques e.g running stitch, glue, over stitch, stapling. Explore different finishing techniques Know and use technical vocabulary. 	 Understand that different mechanisms produce different types of movement e.g levers, sliders, wheels and axels. Know and use technical vocabulary. Explore and use wheels, axles and axle holders. Distinguish between fixed and freely moving axles. 	stronger, stiffer ar	e freestanding structures nd more stable. hnical vocabulary relevant
Year 3	Autumn: Stone age to iron age.	Spring: Japan	Summer: A	Ancient Greece
	Iron man inspired models	Cooking	Greek inspired toys:	Sculpture: soap carving

mechanisms

- Research the history of the Iron man, evaluate models created out of different materials e.g metal, wood, plastic.
- Design an iron man model, specifically stating the materials used and how it will be joined.
- Make first model, evaluate its strength and consider how it can be improved
- Adapt model to suit the design brief better.
- Peer and self assess
- Create a background (art) for the Iron man to live and create short stories with the models to perform (could link to IT)

- Learn about a specific region of Japanese food and 'Washoku' and 'youshoku' style food.
- Understand the main components of Japanese dishes and compare to English dishes.
- Plan, prepare and cook a specific Japanese dish and evaluate it.
- Children can research toys from the Ancient Greek period, evaluating their uses and comparing to
- toys today.
- Learn about levers and linkage
- mechanisms and if possible deconstruct a simple toy or object.
- Learn about a fixed and loose pivot and discuss which type would be needed for a moving part of
- an object.
 After reading the design brief, children need to write a step by step plan, carefully considering the materials they

- Investigate marble carvings of significant Greek culture, look at similarities and differences between statues and the variant levels of detail.
- Discuss the difference between soap and marblein properties and cost.
- Independent research: children are to use the internet to find a picture to copy.
- Practice using a cocktail stick to scratch away the surface of an orange.
- Resources: soap, cocktail sticks, plastic knife, picture. Use a cocktail stick to gently carve the shape of the stature, start

			should use to make a moving toy. • Evaluate the	chipping way small parts at a time.Begin to carve some features,
			finished product against the design criteria.	removing the soap to reveal eyes, nose and mouth. https://www.barlow .derbyshire.sch.uk/greek- soap-sculptures/
Skills Covered : Mechani sms Textiles Cooking Construc tion and sculpture s Electrica I systems	 Develop and use knowledge of how to construct strong, stiff shell structures. Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes. Know and use technical vocabulary relevant to the project. Investigate and evaluate a range of products including the ingredients, materials, components, and techniques that are used. Text and evaluate their own products against design criteria and the intended user and purpose. Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work. 	 Know how to use appropriate equipment and utensils to prepare and combine food. Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. Know and use relevant technical and sensory vocabulary appropriately. Understand how to prepare and cook a variety of dishes including experience of using a heat source. Begin to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Be able to identify foods which come from the UK and other counties of the world. 	 Understand and use lever and linkage mechanisms. Distinguish between fixed and loose pivots. Know and use technical vocabulary. 	 Begin to show an awareness of objects having a third dimension and perspective. Learn to secure work to continue at a later date. Shape, form, model and construct from observation or imagination.

		 Understand what to do to be hygienic and safe. Measure and weigh ingredients appropriately. 	
Year 4	Autumn: Ancient Egypt Design and make a Carnopic Jar	Spring: Rainforest Electricity	Summer: Romans Mosaics/ sculpture of artefacts
	 Learn about the importance of Canopic jars and the materials they can be made from. Evaluate different designs of Canopic Jars to gain understanding of the colour and links to the Gods Design their own Canopic jar Use Clay to create the head of the Canopic jar and add paper mache Add colour, texture to make their models closely linked to historical artefacts Evaluate final product. 	 Rainforest cooking Learn about the food created and harvested in the Rainforest. Create a range of dishes, designed to represent the life of inhabitants of the rainforest. Write safety instructions / risk assessment 	 Learn about the history/ purpose of mosaics and artefacts. Sculpt an artefact out of clay Design a picture out of mosaics, thinking about tile size etc (repeating patterns) Tile a mosaic border and insert a motif.
Skills Covered : Mechani sms Textiles Cooking Construc tion and sculpture s	 Develop and use knowledge of how to construct strong, stiff shell structures. Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes. Know and use technical vocabulary relevant to the project. Select and use appropriate tools to measure, mark out, cut, score, shape and combine with some accuracy related to their products. 	 Know how to use appropriate equipment and utensils to prepare and combine food. Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. Know and use relevant technical and sensory vocabulary appropriately. Understand how to prepare and cook a variety of dishes including experience of using a heat source. 	 Gain more confidence in carving as a form of 3D art. Demonstrate awareness in environmental sculpture and found object art. Show awareness of the effect of time upon sculptures. Experiment with a range of collage techniques such as tearing, overlapping and layering to create images and represent textures. Use collage as a means of collecting ideas and information and building a visual vocabulary.

Electrica l systems	 Explain their choice of materials according to functional properties and aesthetic qualities. 	 Begin to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Be able to identify foods which come from the UK and other counties of the world. Understand what to do to be hygienic and safe. Measure and weigh ingredients appropriately. 		
Year 5	Autumn: Anglo Saxons Sewing: the Bayeux Tapestry	Spring: Bunkers, Bombs and the Blitz Designer: Christopher Raeburn Inspired by 'make do and mend'.	Electricity (Geography, DT and	from two Cities Mechanisms- toys (cams)
	 Learn about the Bayeux Tapestry and the significance to History. Tea bag/ dye a sheet of card or fabric. Use fabric/ paper/ ink to create the shapes and add colour. Add the border using any form of tool. Use a black pen to add outlines. Weave or add overstitch to the design. www.twinkl.co.uk/ resource/ks2-bayeux-tapestry-art-activity-t-ad-281	 Learn about the designer Raeburn and the importance of sustainability. Compare to WW2 'make do and mend' movement. Disassemble textile products to understand how they've been constructed. Design: a bag or pencil case out of scrap material. Create a mock up version Form final product. 	 STEM) Consider how flooding alarms are used and evaluate their significance / usefulness in different parts of the world. Learn how to draw electrical symbols. Design a circuit which when the water level rises, it will light up a sign on a board. 	 Learn about Pierre Jaquet- Doz, Leonardo da Vinci and Archytas of Tarentum and their impact on mechanism development. Learn different Cam movements and explore which one would allow different toys to move. Explore different movements

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			 Evaluate how this would be effective in real life. https://www.stem.org.u k/resources/elibrary/res ource/30094/generating -electricity 	 through prototypes Know the component which make up a functional cam mechanism. Design final toy (in groups) Carefully measure, mark out and assemble the cam mechanism and secure correctly. Apply finishing techniques, considering the user.
Skills Covered : Mechani sms Textiles Cooking Construc tion and sculpture s Electrica I systems	 Produce a 3D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics. Understand how fabrics can be strengthened, stiffened and reinforces where appropriate. Know and use technical vocabulary. Select the tools and techniques they need to shape, assemble and join materials. Producing items which represent other objects. 	 Use fabrics to create 3D structures. Use different grades of threads and needs. Experiment with a range of media to overlap and layer creating interesting colours and textures and effects. Produce a 3D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics. 	 Understand and use electrical systems in their products linked to science coverage. Apply their understanding of computing to program and control their products Know and use technical vocabulary. 	 Understand that mechanical and electrical systems have an input, process and an output. Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. Know and use technical vocabulary.

Year 6	Autumn: Seeing the 'Her' in Hero Marbalous structures (marble runs) • Explore free standing structures and how	 Understand how fabrics can be strengthened, stiffened and reinforces where appropriate. Know and use technical vocabulary. Spring: Our Earth Matters Cooking Explore food from around the 	Summer: Are all English people immigrants? Auto animals Understand that mechanical and electrical
	 their specific joins support their strength. Design and test a range of materials and joins. Show knowledge of using a range of bends in their marble run Test and improve the design so it is useable. 	 world and sort them into different food groups. Follow simple recipes to create dishes Complete a risk assessment on the skills involved. 	 systems have an input, process and an output. Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. Know and use technical vocabulary.
Skills Covered : Mechani sms Textiles Cooking Construc tion and sculpture s Electrica I systems	 Understand how to strengthen, stiffen and reinforce 3D frameworks. Know and use technical vocabulary relevant to the project. 	 Know how to use utensils and equipment including heat sources to prepare and cook food. Understand about seasonality in relation to food products and the source of different food products. Know and use relevant technical and sensory vocabulary. Begin to understand that different food and drink contains different substances (nutrients, water and fibre) that are needed for health. Describe what to do to be hygienic and safe. Use appropriate tools and equipment, weighing and measuring with scales. Understand how to use a range of techniques such as peeling, 	 Understand that mechanical and electrical systems have an input, process and an output. Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. Know and use technical vocabulary.

	chopping, slicing, grating, mixing,			
	spreading, kneading and baking.			