



Year	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	International Town	World - Festivals	World Constitution	World- Animals	World – Global Garden	Wadd Jawa
Reception	International Term	world - Festivals	World – Super-Heroes	world- Animais	world – Global Garden	World -Journeys
	To know the names of different materials.	To know how to join together materials	To know that all materials are precious and should not be wasted	To know the name and use of some simple tools	Observe, explore and adapt work	To know and use specific vocabulary
Year 1		Christmas stockings			Healthy eating	Castles
		To understand how to sew two pieces of material together.			To understand the basic principles of a healthy and varied diet to prepare dishes.	To explore and evaluate a range of different buildings. To design purposeful products based on design criteria.
Year 2		Construction Moving Vehicles Wheels and Axels		Food Technology Bread Making		Textiles Finger Puppet Animals
		To understand how the different mechanisms in a vehicle help it move.		To understand a what the function of each ingredient in the bread. Why do we use yeast?		To understand how to sew a basic stitch. To understand the appropriate use of materials.
Year 3		Construction 3D Photo Frames		Food Technology Soup Making		Construction Pneumatic Toy Moving Monsters
		To understand how to make a 3D frame using different design techniques. Know methods to create and secure corners.	To understand how to prepare and cook soup (with adult supervision).			To understand what a pneumatic mechanism is and how it works.
Year 4		Construction Electrical Circuits and Levers Light up Electric Christmas Cards	Textiles Viking Purses		Food Technology Biscuits	
		. To understand how to use several components in an electrical circuit.	To understand how to use a range of techniques to join materials so they are functional.		To design and create a biscuit that would be enjoyable to eat.	
Year 5		Food Technology Pizza		Construction Bridges		Construction Moving Toys Gears and Pulleys
		To understand how to prepare, knead and bake a savoury pizza.		To understand how to make a strong structure and to be able to reinforce it		To learn how cams work and how they are used to create movement. To learn what effect the shape makes to the movement.
Year 6			Food Technology Rations	Construction Shelters		Microbots Active Volcanoes





			To understand how to design, prepare and cook.	To know how to create a strong and stable shelter using natural materials.		Children understand how coding and programming can create a product fit for purpose.
Year	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Theme: Knowledge and understanding of the world-Ourselves.	Theme: Knowledge and understanding of the world-Festivals	Theme: Knowledge and understanding of the world – Super-Heroes	Theme: Knowledge and understanding of the world-Animals	Theme: Knowledge and understanding of the world – Global Garden	Theme: Knowledge and understanding of the world - Journeys
Reception	Key Question: What shall I use? Skills: To explore materials	Key Question: How can I attach this?	Key Question: How much do I need?	Key Question: Which tool should I use?	Key Question: How will I improve my design?	Key Question: Shall I show you?
	Knowledge: To know the names of different materials.	Skills: To use different techniques for joining materials safely	Skills: Use materials with care and precision	Skills: Use a range of tools with skill and co-ordination	Skills: Observe, explore and adapt work	Skills: To use talk to explain the process
		Knowledge: To know how to join together materials Theme: Christmas stockings	Knowledge: To know that all materials are precious and should not be wasted	Knowledge: To know the name and use of some simple tools	Knowledge: Dependent upon the above Theme: Healthy eating	Knowledge: To know and use specific vocabulary Theme: Castles
Year 1		Key Question: How do you design, make and evaluate a stocking? Skills: To explain what my product is for, and how it will work. To use pictures and words to plan, begin to use models. To design a product for myself following design criteria. To research similar existing products. To measure, cut and join textiles to make a product, with some support			Key Question: How do you make a healthy salad? Skills: To wash hands & clean surfaces To think of interesting ways to decorate food To say where some foods come from, (i.e. plant or animal) To describe differences between some food groups (i.e. sweet, vegetable etc.) To discuss how fruit and vegetables are healthy	Key Question: How do you design and construct a castle? Skills: To explain what I'm making and why To consider what I need to do next To select tools/equipment to cut, shape, join, finish and explain choices To measure, mark out, cut and shape, with support To choose suitable materials and explain
		To choose suitable textiles To talk about existing products considering: use, materials, how they work, audience, where Knowledge: To understand how to sew two pieces of material together.			To cut, peel and grate safely, with support. Knowledge: To understand the basic principles of a healthy and varied diet to prepare dishes.	choices Try to use finishing techniques to make the product look good To work in a safe and manner. To talk about my work, linking it to what I was asked to do they might be used To talk about things that other people have made To begin to talk about what





	Theme: Moving Vehicles- Wheels	Theme: Bread making	could make product better To begin to measure and join materials, with some support To describe differences in materials To suggest ways to make material/product Knowledge: To explore and evaluate a range of different buildings. To design purposeful products based on design criteria. Theme: Finger puppet animals
Year 2	and Axels Key Question: How do you make a moving vehicle? Skills: To design using models, diagrams, begin to use ICT To design products for myself and others following design criteria. To choose best tools and materials, and explain choices To use knowledge of existing products to produce ideas To make suggestions as to what I need to do next. To join materials/components together in different ways To measure, mark out, cut and shape materials and components, with support. To describe which tools I'm using and why To choose suitable materials and explain choices depending on characteristics. To describe what went well, thinking about design criteria To talk about existing products considering: use, materials, how they work, audience, where they might be used; express personal opinion To evaluate how good existing products are	Key Question: How do you make bread? Skills: To explain hygiene and keep a hygienic kitchen To describe properties of ingredients and importance of varied diet To say where food comes from (animal, underground etc.) To describe how food is farmed, home-grown, caught To draw an eat well plate and explain there are groups of food To describe "five a day" To cut, peel and grate with increasing confidence Knowledge: To understand a what the function of each ingredient in the bread. Why do we use yeast?	Key Question: How do you make a finger puppet? Skills: To measure textiles To join textiles together to make a product, and explain how I did it To carefully cut textiles to produce accurate pieces To explain choices of textile To understand that a 3D textile structure can be made from two identical fabric shapes. Knowledge: To understand how to sew a basic stitch. To understand the appropriate use of materials.





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		To talk about what I would do differently if I were to do it again and why			
		To measure materials			
		To describe some			
		different characteristics of			
		materials			
		To join materials in different ways			
		To use joining, rolling or folding to			
		make it stronger			
		To use own ideas to try to			
		make product stronger			
		To use levers or slides			
		To begin to understand how to			
		use wheels and axles			
		Knowledge:			
		To understand how the different			
		mechanisms in a vehicle help it move.			
	LEVERS- moving images	Theme: 3D Photo Frames	Theme: Soup making		Theme:
Voca 2	LEVERS Moving images	Key Question:	Key Question:		Moving Monsters
Year 3		How do you make a 3D Photo	How do you make a healthy		Key Question:
		Frame?	soup?		How does a Pneumatic
		Skills:	Skills:		mechanism work?
		To create a plan which shows	To carefully select ingredients		Skills:
		order, equipment and tools	To use equipment safely		To create a plan which shows
		To describe a design using an	To think about how to grow		order, equipment and tools
		accurately labelled sketch and	plants to use in cooking To begin to understand where		To describe a design using an
		words	food comes from in the UK and		accurately labelled sketch and
		To make design decisions and	the wider world		words
		explain how product will look	To describe how healthy		To make design decisions and
		To make a prototype and	diet= variety/balance of		explain how product will work To make a prototype and
		begin to use computers to show design	food/drinks		begin to use computers to show
		To begin to measure, mark	To explain how food and		design
		out, cut and shape	drink are needed for		To begin to measure, mark
		materials/components with	active/healthy bodies.		out, cut and shape
		accuracy	To prepare hot soup safely and		materials/components
		To begin to assemble, join	hygienically To grow in confidence		with accuracy
		and combine materials	understanding branding of		To begin to assemble, join
		and components with accuracy	food and drink products		and combine materials
		To begin to apply a range	,		and components with accuracy
		of finishing techniques with some accuracy			To begin to apply a range of finishing techniques
		To begin to understand by whom,	Knowledge:		with some accuracy
		when and where products were	To understand how to prepare		To begin to understand by whom,
		designed	and cook soup (with adult		when and where products were
		To learn about some	supervision).		designed
		inventors/designers/			To learn about some
		engineers/chefs/ manufacturers			inventors/designers/
		of ground-breaking products			
		Knowledge:			





	To understand how to make a 3D frame using different design techniques. Know methods to create and secure corners.				engineers/chefs/ manufacturers of ground-breaking products To use pneumatics to create movement Knowledge: To understand what a pneumatic mechanism is and how it works.
Year 4	Theme: Light up Electric Christmas Cards Key Question: How to create an electrical card? Skills: To say how realistic a plan is. To include an annotated sketch To make and explain design decisions considering availability of resources To explain how product will work To make a prototype and begin to use computers to show design. To assemble, join and combine materials and components accuracy To apply a range of finishing techniques with some accuracy To research whether products can be recycled or reused To use simple circuit in product Knowledge: To understand how a light up Christmas card works and to create an electrical circuit. To understand how to use several components in an electrical circuit. Designer/Inventors link: Benjamin Franklin & Thomas Edison	Key Question: How do you design, make and evaluate a Viking purse? Skills: To think about user when choosing textiles To think about how to make product strong To begin to devise a Template To explain how to join materials in a different way To understand that a simple fabric shape can be used to make a 3D textile project Knowledge: To understand how to use a range of techniques to join materials and make it aesthetically pleasing and functional.		Key Question: What ingredients do you need to make a biscuit? Skills: To prepare and cook some dishes safely and hygienically To use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading and baking Knowledge: To design and create a biscuit that would be enjoyable to eat. The ingredients contained in biscuit recipes.	
Year 5	Theme: Pizza Key Question: How do you make a pizza? Skills:		Theme: Bridges Key Question: How do you make a strong bridge? Skills: To model and refine design		Theme: Moving Toys Key Question: How do cams work? Skills: To model and refine design





	To prepare and cook some savoury dishes safely and hygienically including, where appropriate, use of heat source To use range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Knowledge: To understand how to prepare, knead and bake a savoury pizza.	ideas by making prototypes and using pattern pieces. To use computer-aided designs To mainly accurately apply a range of finishing techniques To use techniques that involve a small number of steps To begin to be resourceful with practical problems begin to evaluate how much products cost to make and how innovative they are To research how sustainable materials are To talk about some key inventors/designers/engineers/manufacturers of ground-breaking bridges Knowledge: To understand how to make a strong structure and to be able to reinforce it		ideas by making prototypes and using pattern pieces. To use computer-aided designs To mainly accurately apply a range of finishing techniques To use techniques that involve a small number of steps To begin to be resourceful with practical problems begin to evaluate how much products cost to make and how innovative they are To research how sustainable materials are To begin to use cams, pulleys or gears. Knowledge: To learn how cams work and how they are used to create movement. To learn what effect the shape makes to the movement.
Year 6	Key Question: Why do you need to build a shelter? How do you build a strong and stable shelter? Skills: To clearly explain how parts of design will work, and how they are fit for purpose To independently model and refine design ideas by making prototypes and using pattern pieces To use computer-aided designs To accurately measure, mark out, cut and shape materials/components To accurately assemble, join and combine materials/components		Theme: Savoury Quiches Key Question: How do you make a savoury Quiche? Skills: To adapt recipes to change appearance, taste, texture or aroma. To describe some of the different substances in food and drink, and how they can affect health To prepare and cook a variety of dishes safely and hygienically including, where appropriate, the use of heat source. To use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.	Key Question: What could you make to stay safe at night? Skills: To code and program, a product suitable for keeping themselves safe in the dark. To understand and use electrical systems in their products and how to evaluate the effectiveness of them To program a computer to monitor changes in environment and control of a product To debug a sequence and amend mistakes in a code Knowledge: Children understand how coding
	To accurately apply a range of finishing techniques To use techniques that involve several steps To be resourceful with		Knowledge: To understand how to design, prepare and cook a quiche.	and programming can create a product fit for purpose.





practical problems evaluate how much products cost to make and how innovative they are To research and discuss how sustainable materials are To consider the impact of products beyond their intended purpose To select materials carefully, considering intended use of the product, the aesthetics and functionality. To explain how product meets design criteria To reinforce and strengthen a 3D structure or product Knowledge: To know how to create a strong		
Knowledge:		