/EYFS	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic Theme		Bears		Healthy me		Puppet Show
DT		Structure – Baby Bears Chair		<u>Food – Fruit Kebab</u>		Textiles – Sock puppet
Substantive Knowledge		To be able to choose appropriate materials to make a strong chair for Baby Bear.     To be able to evaluate if their chosen materials made an effective chair for Baby Bear.  Structures     To be able to know what makes an effective chair.     To be able to investigate the best material to make a strong chair.		To be able to choose their favourite fruits and design a simple fruit kebab.     To be able to construct a simple fruit kebab and evaluate what they like and dislike.  Food     To be able to name a variety of fruits and recognise if they can be grown in the local area.     To be able to taste a variety of fruits and explain which fruit they like and dislike.		Design and Evaluate  To be able to explore a range of puppets and describe what they like and don't like about them.  To be able to use their sock puppet for storytelling and evaluate whether it was successful or not.  To choose a character from a familiar story and design a sock puppet.  Textiles  To be able to recognise the importance of recycling and reusing different materials.  To be able to join recycled materials to construct a sock puppet to support story telling.
Disciplinary		Design and Making		Design and Making		Design and Making
Knowledge (Skills)		Explore- Experiment and build with a range of construction resources, find out about the properties and functions of different construction materials.  Design - Talk about their ideas, choose resources, tools and techniques with a purpose in mind.  Make - Make models and props using different construction materials e.g. construction kits, reclaimed materials. Experiment with different ways to build, construct and join resources.		Explore- Experiment and build with a range of construction resources, find out about the properties and functions of different construction materials.  Design - Talk about their ideas, choose resources, tools and techniques with a purpose in mind.  Make - Make models and props using different construction materials e.g. construction kits,		Explore- Experiment and build with a range of construction resources, find out about the properties and functions of different construction materials.  Design - Talk about their ideas, choose resources, tools and techniques with a purpose in mind.  Make - Make models and props using different construction materials e.g. construction kits, reclaimed materials. Experiment with different ways to build, construct and join resources. Make props to use in their play/role play/when acting out stories/ taking on story characters.

		Make props to use in their play/role play/when acting out stories/ taking on story characters.  Evaluate - Talk about what they like and dislike		reclaimed materials. Experiment with different ways to build, construct and join resources. Make props to use in their play/role		Evaluate - Talk about what they like and dislike about their models/ constructions/props say why and how they would change them.
		about their models/ constructions/props say why and how they would change them.		play/when acting out stories/ taking on story characters.		Tools and Equipment - Use equipment and tools to build, construct and make simple models and props; use tools
		<u>Tools and Equipment -</u> Use equipment and tools to build, construct and make simple		Evaluate - Talk about what they like and dislike about their models/		and equipment linked to food preparation.
		models and props; use tools and equipment linked to food preparation.		constructions/props say why and how they would change them.		Safety- Handle and use equipment appropriately and safely.
		<u>Safety</u> - Handle and use equipment appropriately and safely.		Tools and Equipment - Use equipment and tools to build, construct and make simple models and props; use tools and equipment linked to food preparation.		
				Safety- Handle and use equipment appropriately and safely.		
Year 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic Theme		Supertato	Lost and found			Salads
DT Substantive Knowledge		Mechanisms- Sliders & Levers  Be able to generate ideas based on a simple criteria.  • Know the names of different materials e.g. fabric, wood, card, paper.  • Be able to use drawings to record ideas.  • Know and say own products meet the design criteria.  Mechanisms  • Know that different mechanisms produce different types of movement.  • Know how to make simple mechanisms including flaps, sliders and levers.	Textiles (Templates and Joining) - Design and evaluate  Be able to generate ideas based on a simple criteria.  Know the names of different materials e.g. fabric, wood, card, paper.  Be able to use drawings to record			Food technology  Design and evaluate  Be able to generate ideas based on a simple criteria.  Know the names of different materials e.g. fabric, wood, card, paper.  Be able to use drawings to record ideas.  Know and say own products meet the design criteria.  Food  Know that they should wash hands, tie hair back, wear an apron and wipe down work surface before preparing food.  Understand the idea of healthy and not healthy

	card.  • Know how to use a hole punch.  • Know how to fold, tear and cut paper and card.  • Be able to cut along lines, straight and curved.	<ul> <li>Know and say own products meet the design criteria.</li> <li>Textiles</li> <li>Know how to cut, shape and join paper, card and fabric, using tape, staples, glue and pins.</li> <li>Know how to cut out shapes created with a template.</li> <li>Know how to decorate fabric with detail such as ribbons, sequins beads etc.</li> <li>Know how to colour fabric using techniques such as fabric pens, paints and printing.</li> </ul>	Know how to use a bridge hold for chopping hard ingredients using a knife.
Disciplinary Knowledge (Skills)	Design  Describe and use pictures to show what they want to make and make mock-ups to try out their ideas  Functionality  Explore existing products.  Explain what they are making and say what they do and do not like about their product.  Mechanisms  Know ways of making a structure stronger and show how to stiffen some materials	Design  Describe and use pictures to show what they want to make and make mock-ups to try out their ideas  Functionality  Explore existing products.  Explain what they are making and say what they do and do not like about their product.  Textiles  Join various chosen fabrics by	Design  Describe and use pictures to show what they want to make and make mock-ups to try out their ideas  Functionality Explore existing products. Explain what they are making and say what they do and do not like about their product.  Food Begin to understand that all food comes from plants or animals Begin to develop children's peeling and chopping skills

Year 2	Autumn 1	Autumn 2  Cinderella's carriage	using glue staples and pins.  Decorate and colour products.  Spring 1		Spring 2	Summer 1	Summer 2
Topic		Cinderena's carriage	Playgrou	ind equipment			Picnic for a school trip
Theme							
DT Substantive Knowledge		<ul> <li>Wheels &amp; Axles –</li> <li>Design and evaluate</li> <li>Know how existing products are made.</li> <li>Know how to select materials from a limited range.</li> <li>Know that adding notes to drawings help explain ideas</li> <li>Know and say how existing products do or do not achieve their purpose.</li> <li>Be able to say how you will make something using simple terms e.g. first, next, then.</li> <li>Mechanisms</li> <li>Know different axel fittings and their strengths and weaknesses.</li> <li>Know how to attach wheels to a chassis using an axle.</li> </ul>	Know that adding no ideas     Know and say how e achieve their purpos     Be able to say how y simple terms e.g. firs Structures     Know how to make f stronger, stiffer and	materials from a limited range. ites to drawings help explain  xisting products do or do not e. ou will make something using it, next, then.			<ul> <li>Food technology</li> <li>Design and evaluate</li> <li>Know how existing products are made.</li> <li>Know how to select materials from a limited range.</li> <li>Know that adding notes to drawings help explain ideas</li> <li>Know and say how existing products do or do not achieve their purpose.</li> <li>Be able to say how you will make something using simple terms e.g. first, next, then.</li> <li>Food</li> <li>Know the different sections of the Eat Well plate and start to understand the idea of a balanced meal.</li> <li>Know how to name and sort food on the Eatwell Plate.</li> <li>Know that food should be stored appropriately and put away e.g. in the fridge.</li> <li>Know to clean equipment in warm soapy water and to throw away food that has been dropped on the floor.</li> <li>Know that food has to be farmed, grown elsewhere (e.g. at home), or caught.</li> </ul>
Disciplinary Knowledge (Skills)		Design Suggest more than one idea for their product, using design criteria they have made. Use drawings, notes and ICT to communicate their design. Functionality Explore existing products and say if they meet	design criteria they have Use drawings, notes and design.  Functionality				Design Suggest more than one idea for their product, using design criteria they have made. Use drawings, notes and ICT to communicate their design. Functionality Explore existing products and say if they meet their

Year 3	Autumn	their purpose. Discuss how closely their product meets their design criteria.  Mechanisms Experiment with levers and sliders to find different ways of making things move Attach wheels to a chassis using and axle.  Autumn 2	criteria. Structur • Know	how close res how to read more	make freestanding structures stronger, stable  Spring 2		purpose. Discuss how closely their product meets the criteria. Food -Begin to use techniques such as cutting, pe grating.  Summer 1	eling and
	1			1	- 16 - 60			2
Topic		Sustainable bags			Breakfast muffins		Packaging	
Theme								
DT Substantive Knowledge		<ul> <li>Textiles         Design and evaluate         <ul> <li>Be able to develop more than one design or adaptation.</li> <li>Know how to plan a sequence of actions to raproduct.</li> <li>Know how to consider aesthetic qualities when choosing materials.</li> <li>Know how to record and plan using annotate sketches.</li> <li>Know how to select from a range of tools.</li> <li>Know how to create design criteria.</li> <li>Textiles</li> <li>Know how to strengthen and stiffen fabric.</li> <li>Know how to use a paper template for pattern techniques.</li> </ul> </li> <li>Know how to use different fasteners</li> </ul>	make nen ed		<ul> <li>Food Design and evaluate <ul> <li>Be able to develop more than one design adaptation.</li> <li>Know how to plan a sequence of actions that make a product.</li> <li>Know how to consider aesthetic qualities choosing materials.</li> <li>Know how to record and plan using annoth sketches.</li> <li>Know how to select from a range of tools.</li> <li>Know how to create design criteria.</li> </ul> </li> <li>Food <ul> <li>Know how to make healthy choices using Eat Well plate.</li> <li>Know how to Join and combine a range of ingredients.</li> </ul> </li> </ul>	n or s to s when otated ls. g the foods. of food	<ul> <li>Structures – shell structures</li> <li>Design and evaluate</li> <li>Be able to develop more than one design or adaptation.</li> <li>Know how to plan a sequence of actions to make a product.</li> <li>Know how to consider aesthetic qualities when choosing materials.</li> <li>Know how to record and plan using annotated sketches.</li> <li>Know how to select from a range of tools.</li> <li>Know how to create design criteria.</li> <li>Structures</li> <li>Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes.</li> <li>Develop and use knowledge of how to construct strong, stiff shell structures</li> <li>Know how CAD can aid in the design and make process.</li> </ul>	
Disciplinary Knowledge (Skills)		Design Develop ideas by changing initial design. Record their design with annotated sketches. understand how key events and individuals in desand technology have helped shape the world Functionality Explore existing products and use them as a start point for design.			Design Develop ideas by changing initial design. Record their design with annotated sketches. Functionality Explore existing products and use them as a stapoint for design. Discuss how closely their product meets their coriteria and consider how finished product cou	starting r design	Design Develop ideas by changing initial design. Record their design with annotated sketches. Functionality Explore existing products and use them as a starting point for design. Discuss how closely their product meets their design criteria and consider how finished product	

Discuss how closely their product meets their design	improved.	could be improved.	
criteria and consider how finished product could be	<u>Food</u>	<u>Structures</u>	
improved.	Follow instructions or a recipe using peeling,	Use techniques to strengthen shell structures.	
Select from and use a wide range of materials and components including textiles.  Textiles  Use sewing progression to learn new stitches including running stitch and over stitch.  Add decoration by sewing on buttons, sequins etc and making loops.	chopping, slicing and grating techniquesBegin to know food is grown, reared and caught in the UK and the wider world.	Use CAD (silhouette) to design a net.	

Year 4	Autumn	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic Theme			Night light	Pizzas – locality		Ancient Greece
DT Substantive Knowledge			Design and evaluate     Know how to use CAD.     Know how to develop prototypes to share and test ideas.     Know how to research the needs of the user.  Electrical systems     Know how to incorporate buzzers, bulbs, switches etc into a system.	Evaluate     Know what a cross sectional exploded diagram and begin to use one.     Know how to develop prototypes to share and test ideas.     Know how to research the needs of the user.  Food     Begin to have some knowledge of the seasonality of fruit and vegetables.     Know some of the countries/ continents fruits and vegetables are grown.     Develop understanding of how meat and fish are reared and caught.     Know that some foods have use by dates and life depends on the type of product.		Levers and Linkages (Pop Up Books)      Design and evaluate     Know what a cross sectional exploded diagram and begin to use one.     Know how to use CAD where appropriate.     Know how to develop prototypes to share and test ideas.     Know how to research the needs of the user.      Mechanisms     Know different ways of making levers and linkages and how they can change movement or make then bigger.     Know how to use card or lolly sticks etc to make levers and linkages.
Disciplinary Knowledge (Skills)			<ul> <li>Design</li> <li>Develop ideas by changing initial designs and making a prototype.</li> <li>Record their design with annotated</li> </ul>	<ul> <li>Design</li> <li>Develop ideas by changing initial designs and making a prototype.</li> <li>Record their design with annotated</li> </ul>		Design     Develop ideas by changing initial designs and making a prototype.     Record their design with annotated

		sketches, using CAD where ap  Functionality  Research and evaluate existin use them as a starting point for Discuss how closely their proof their design criteria, discussin and weaknesses.  Electrical Systems  Incorporate a circuit into a model. Use electrical systems such as buzzers.	g products to or design. duct meets g strengths	sketches, using CAD where appropriate in the interest of the i	oroducts to design. ct meets trengths nainly e, kneading		sketches, using CAD where appear Functionality  Research and evaluate existing to use them as a starting point  Discuss how closely their productive design criteria, discussing and weaknesses.  Mechanisms  Use linkages to make movement and more varied.  Make a prototype of a productive	g products t for design. fuct meets g strengths
Year 5	Autumn	Autumn 2	Spring 1		Spring 2	Summer 1		Summer 2
Topic Theme		Space(Moon Buggies)		Soup		dolls		
DT Substantive Knowledge		Pulleys and Gears/electrical systems  Design and evaluate  Now existing products from the internet, books which can influence design ideas.  Know how to plan sequence of work. E.g. Using a story board.  Mechanisms  Know how a pulley can be used with a motor to power a vehicle.  Know how a pulley works.	books w  Know ho Using a serioula  Know ho particula  Know ho seasona  Know w avoid th meat, us Know w and proc	valuate visting products from the internet, which can influence design ideas. Ow to plan sequence of work. E.g. story board. Ow to select and prepare food for a car purpose. Ow to select foods based on lity. What cross contamination is and how to is e.g. Washing hands after using raw sing different chopping boards etc. Ow to weigh and measure using scales. Where and how ingredients are grown		books whi  Know how Using a sto Textiles  Know how Fieces and Know how blanket sti Know how layout.  Know that before ass	ting products from the internet, ch can influence design ideas.  It to plan sequence of work. E.g. bry board.  It to pin and tac fabric together.  It to create 3d project using pattern deseam allowance.  It to use over sew, back stitch and litch.  It to read and understand a pattern descomponents should be decorated	
Disciplinary Knowledge (Skills)		<ul> <li>Design</li> <li>Develop a chosen design in depth from a selection of sketches and models.</li> <li>Use models, kits and annotated diagrams to develop designs.</li> </ul>	selection	a chosen design in depth from a n of sketches and models. dels, kits and annotated diagrams to designs.		selection o	chosen design in depth from a of sketches and models. Is, kits and annotated diagrams to esigns.	

<u>Functionality</u>	<u>Functionality</u>	<u>Functionality</u>
<ul> <li>Draw and sketch existing products to understand them and use them as a starting point for design.</li> <li>Discuss how closely their product meets their design criteria, discussing how it could be made to closer fit the criteria.</li> </ul>	<ul> <li>Draw and sketch existing products to understand them and use them as a starting point for design.</li> <li>Discuss how closely their product meets their design criteria, discussing how it could be made to closer fit the criteria.</li> </ul>	<ul> <li>Draw and sketch existing products to understand them and use them as a starting point for design.</li> <li>Discuss how closely their product meets their design criteria, discussing how it could be made to closer fit the criteria.</li> </ul>
<u>Mechanisms</u>	<u>Food</u>	<u>Textiles</u>
Build frameworks using appropriate joining techniques to support mechanisms.	<ul> <li>Understand that seasons may affect food available.</li> <li>Understand how food is processed into ingredients.</li> <li>Gain confidence in the skills kneading mixing, baking, cutting, peeling and grating.</li> </ul>	<ul> <li>Understand seam allowance,</li> <li>Create products using a pattern.</li> <li>Use blanket stitch.</li> </ul>

Year 6	Autumn	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
		Early Islamic Civilisation	Fairground Carousel		Dolls house for ks1	
DT Substantive Knowledge		Food Technology: Grab and Go Product  Design and Evaluate  Know how to develop an idea in depth  Food:  To know a range of cooking techniques  To know how chefs have influenced our attitudes towards food technology  To know the nutritional value of foods	Programme, monitoring and Control  Design and Evaluate  Know how to develop an idea i  Identify strengths and weakness design ideas.  Test the system to demonstrat effectiveness for the intended purpose.  Electrical Systems:  Understand electrical systems in the products.  Understand the use of computer of systems in products.	in depth sses of their te its user and	Design and Evaluate: To know how key people and events have influenced design. Know how to develop an idea in depth  Structures: Know how to stiffen and reinforce complex structures. Know how to cut dowel using a hacksaw to the nearest mm.	

Nowledge (Skills)  Design  Use prototypes, exploded diagrams and cross sectional diagrams to develop and communicate ideas.  understand how key events and individuals in design and technology have helped shape the world  Functionality  Identify strengths and weaknesses of their design ideas.  Report how closely their product meets their design criteria having tested it on user, discussing how it could be made to closer fit user's criteria  Food:  Prepare a range of mostly savoury dishes mastering skills learnt.  Select ingredients taking into account their nutritional properties	<ul> <li>Use prototypes, exploded diagrams and cross sectional diagrams to develop and communicate ideas.</li> <li>Functionality         <ul> <li>Report how closely their product meets their design criteria having tested it on user, discussing how it could be made to closer fit user's criteria</li> </ul> </li> <li>Electrical systems         <ul> <li>Use electrical systems in their products.</li> <li>Apply their understanding of computing to program, monitor and control their products.</li> </ul> </li> </ul>	<ul> <li>Use prototypes, exploded diagrams and cross sectional diagrams to develop and communicate ideas.</li> <li>Functionality:         <ul> <li>Identify strengths and weaknesses of their design ideas.</li> </ul> </li> <li>Report how closely their product meets their design criteria having tested it on a user, discussing how it could be made to closer fit the user's criteria</li> <li>Structures:         <ul> <li>Stiffen and reinforce complex structures.</li> <li>Cut using a hacksaw accurately</li> </ul> </li> </ul>	
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