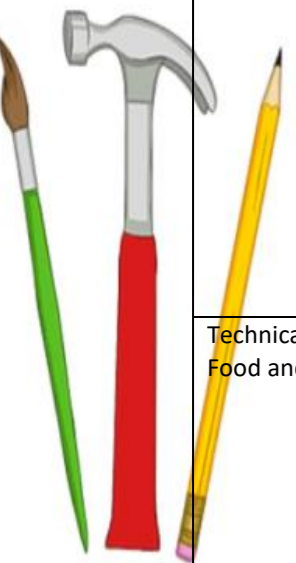


	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Technical Knowledge: Textiles</p>		<p>Measure, cut and join textiles to make a product, with some support.</p> <p>Choose suitable textiles</p> <p>Join textiles together to make a product and explain how I did it.</p> <p>Carefully cut textiles to produce accurate pieces.</p> <p>Explain choices of textile</p> <p>Think about user's wants/needs and aesthetics when choosing textiles.</p> <p>Make product attractive</p> <p>Use a simple joining technique</p> <p>Think about how product might be sold</p> <p>*think carefully about what would improve product</p> <p>*understand that a single 3D textiles project can be made from a combination of fabric shapes.</p>			<p>Think about user when choosing textiles.</p> <p>Think about how to make product strong.</p> <p>Begin to devise a template Explain how to join things in a different way.</p> <p>Understand that a simple fabric shape can be used to make a 3D textiles project</p>		<p>Think about user's wants/needs and aesthetics when choosing textiles.</p> <p>Make product attractive and strong.</p> <p>Think about how product might be sold</p> <p>Think carefully about what would improve product</p>
<p>Technical Knowledge: Food and Nutrition</p>	<p>Begin to understand the importance of a healthy diet.</p>	<p>Understand the importance of varied diet using the Eatwell Guide.</p> <p>Say where food comes from – animal or plant.</p> <p>Grow produce to use in cooking.</p> <p>Cut, peel and chop.</p>	<p>Explain hygiene and keep a hygienic kitchen</p> <p>Describe properties of ingredients and importance of varied diet</p> <p>Say where food comes from (animal, underground etc.) Describe how food is farmed, home-grown, caught</p> <p>Draw eat well plate; explain there are groups of food Describe "five a day"</p> <p>Cut, peel and grate with increasing confidence</p>	<p>Begin to understand the principals of a healthy and varied diet.</p> <p>Begin to understand food comes from the UK and the wider world</p> <p>Carefully select some seasonal ingredients</p> <p>Begin to use a variety of equipment safely.</p> <p>Begin to think about making products look attractive.</p> <p>Think about how to grow plants to use in cooking</p> <p>Begin to understand that a balance of food and drink will result in a healthy diet.</p>	<p>Understand the principals of a healthy and varied diet.</p> <p>Begin to understand food comes from UK and wider world</p> <p>carefully select seasonal ingredients.</p> <p>use equipment safely</p> <p>make product look attractive</p> <p>Begin to grow plants to use in cooking</p> <p>Begin to understand that a balance of food and drink will result in a healthy diet.</p>	<p>*explain how to be safe / hygienic and follow own guidelines *present product well - interesting, attractive, fit for purpose *begin to understand seasonality of foods *understand food can be grown, reared or caught in the UK and the wider world *describe how recipes can be adapted to change appearance, taste, texture, aroma *explain how there are different substances in food / drink needed for health *prepare and cook some savoury dishes safely and hygienically including, where appropriate, use of heat source * use range of techniques such as peeling, chopping, slicing,</p>	<p>Understand a recipe can be adapted by adding / substituting ingredients</p> <p>Explain seasonality of foods</p> <p>Name some types of food that are grown, reared or caught in the UK or wider world</p> <p>Adapt recipes to change appearance, taste, texture or aroma.</p> <p>Describe some of the different substances in food and drink, and how they can affect health</p> <p>*use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing and spreading.</p>



				<p>Begin to explain how food and drink are needed for active/healthy bodies.</p> <p>prepare and cook some dishes safely and hygienically</p> <p>Begin to use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</p>	<p>explain how food and drink are needed for active/healthy bodies.</p> <p>*Prepare and cook dishes safely and hygienically</p> <p>Grow in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</p>	<p>grating, mixing, spreading, kneading and baking.</p>	
<p>Technical Knowledge: Electrical Systems</p>					<p>use number of components in circuit</p> <p>program a computer to control product</p> <p>*incorporate switch into product</p> <p>*confidently use number of components in circuit</p> <p>*begin to be able to program a computer to monitor changes in environment and control product (YEAR 4)</p>		
<p>Technical Knowledge: Mechanisms</p> <p>Mandeep added this row</p>		<p>Explore wheels and axels for a product. Explain choice of materials.</p> <p>To begin to cut and join.</p>	<p>To explore and use wheels and axles in a product.</p> <p>Understand that products need to be stable and durable.</p> <p>To explain own choice of materials.</p> <p>Carefully cut materials to produce accurate pieces.</p>	<p>Investigate different mechanisms and levers in a syringe, balloon pump, trombone and recorder and their uses.</p> <p>Discuss the audience of the product.</p>		<p>Investigate different mechanisms for moving toys such as cams, axels, followers, feet and their uses. Explain choice of shape and size.</p> <p>Discuss the audience, age and suitability of a product.</p>	
<p>Designing skills</p>	<p>*Select and use activities and resources, with help when needed.</p> <p>*Use large-muscle movements to wave flags and streamers, paint and make marks.</p> <p>*Choose the right resources to carry out their own plan.</p> <p>*Use one-handed tools and equipment, for example, making snips in paper with scissors.</p>	<p>have own ideas</p> <p>* explain what I want to do</p> <p>*explain what my product is for, and how it will work</p> <p>* use pictures and words to plan, begin to use models</p> <p>* design a product for myself following design criteria</p> <p>*research a similar product</p>	<p>*have own ideas and plan what to do next</p> <p>* explain what I want to do and describe how I may do it</p> <p>* explain purpose of product, how it will work and how it will be suitable for the user</p> <p>* describe design using pictures, words, models, diagrams, begin to use ICT</p> <p>* design products for myself and others following design criteria</p> <p>* choose best tools and materials, and explain choices</p>		<p>* use research for design ideas</p> <p>* show design meets a range of requirements and is fit for purpose</p> <p>*begin to create own design criteria</p> <p>*have at least one idea about how to create product and suggest improvements for design.</p> <p>* produce a plan and explain it to others</p> <p>*say how realistic plan is.</p> <p>*include an annotated sketch</p>	<p>*use artefacts, internet and videos for research and design ideas</p> <p>*take a user's view into account when designing</p> <p>* begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose</p> <p>* have a range of ideas</p> <p>*produce a verbal logical, realistic plan and explain it to others.</p> <p>*use annotated sketches to explain ingredient selection, material, shape and measurement choices</p>	<p>* draw on market research to inform design</p> <p>* use research of user's individual needs, wants, requirements for design</p> <p>* identify features of design that will appeal to the intended user</p> <p>* create own design criteria and specification</p> <p>* come up with innovative design ideas</p> <p>*follow and refine a logical plan.</p> <ul style="list-style-type: none"> <li>• use annotated sketches,</li> <li>• exploded diagrams</li> </ul> <p>* make design decisions, considering, resources and cost</p>

	<p>*Progress towards a more fluent style of moving, with developing control and grace.</p> <p>*Develop their small motor skills so that they can use a range of tools competently, safely and confidently.</p> <p>*Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor</p> <p>*Use a range of small tools, including scissors, paintbrushes and cutlery.</p>		<p>* use knowledge of existing products to produce ideas</p>	<p>*begin to research others' needs</p> <p>* show design meets a range of requirements</p> <p>* describe purpose of product</p> <p>* follow a given design criteria</p> <p>* have at least one idea about how to create product</p> <p>* create a plan which shows order, equipment and tools</p> <p>*describe design using an accurately labelled sketch and words</p> <p>* make design decisions</p> <p>*explain how product will work</p> <p>* make a prototype</p>	<p>*make and explain design decisions considering availability of resources</p> <p>*explain how product will work</p> <p>* make a prototype</p> <p>*begin to use computers to show design.</p>	<p>* make design decisions considering time, resources and availability of products, anticipating problems that may occur</p> <p>*verbally and clearly explain how parts of product will work/ or should taste</p> <p>anticipating problems that may occur</p> <p>*model and refine design ideas by making prototypes and final choices about ingredients taking tastes into consideration</p>	<p>* clearly explain how parts of design will work, and how they are fit for purpose</p> <p>* independently model and refine design ideas by making prototypes and using pattern pieces</p> <ul style="list-style-type: none"> <li>given opportunity to use computer-aided designs</li> </ul>
Making skills	<p>*Explore how things work.</p> <p>Make imaginative small worlds with blocks and construction kits such as a city with different buildings and a park.</p> <p>*Explore different materials freely, in order to develop their ideas about how to use them and what to make.</p> <p>*Develop their own ideas and then decide which materials to use to express them.</p> <p>*Create closed shapes with continuous lines and begin to use these shapes to represent objects.</p> <p>*Explore, use and refine a variety of artistic</p>	<p>*explain what I'm making and why</p> <p>*consider what I need to do next</p> <p>*select tools/equipment to cut, shape, join, finish and explain choices</p> <p>*measure, mark out, cut and shape, with support</p> <p>*choose suitable materials and explain choices</p> <p>*try to use finishing techniques to make product look good</p> <p>*work in a safe and hygienic manner</p>	<p>explain what I am making and why it fits the purpose</p> <p>*make suggestions as to what I need to do next.</p> <p>*join materials/components together in different ways</p> <p>*measure, mark out, cut and shape materials and components, with support.</p> <p>*describe which tools I'm using and why</p> <p>*choose suitable materials and explain choices depending on characteristics.</p> <p>*use finishing techniques to make product look good</p> <p>*work safely and hygienically</p>	<p>*select suitable tools/equipment, explain choices; begin to use them accurately</p> <p>* select appropriate materials, fit for purpose.</p> <p>* work through plan in order</p> <p>*consider how good product will be</p> <p>* begin to measure, mark out, cut and shape materials/components with some accuracy</p> <p>* begin to assemble, join and combine materials and components with some accuracy</p> <p>* begin to apply a range of finishing techniques with some accuracy</p>	<p>* select suitable tools and equipment, explain choices in relation to required techniques and use accurately</p> <p>*select appropriate materials, fit for purpose; explain choices</p> <p>* work through plan in order.</p> <p>* realise if product is going to be good quality</p> <p>* measure, mark out, cut and shape materials/components with some accuracy</p> <p>*assemble, join and combine materials and components with some accuracy</p> <p>*apply a range of finishing techniques with some accuracy</p>	<p>* use selected tools/ equipment with good level of precision and safety</p> <p>* produce suitable lists of tools, equipment/materials needed to complete the task</p> <p>*select appropriate materials, fit for purpose; explain choices, making informed adaptations by considering functionality</p> <p>* follow a detailed plan</p> <p>* explain how product will appeal to an audience</p> <p>* mainly accurately measure, mark out, cut and shape materials/components</p> <p>*mainly accurately assemble, join and combine materials/components</p> <p>* mainly accurately apply a range of finishing techniques</p> <p>* use techniques that involve a small number of steps</p>	<p>* use selected tools and equipment precisely</p> <p>*produce suitable lists of tools, equipment, materials needed, considering constraints</p> <p>* select appropriate materials, fit for purpose; explain choices, considering functionality and aesthetics</p> <p>* create, follow, and adapt detailed step-by-step plans</p> <p>*explain how product will appeal to audience; make changes to improve quality</p> <p>* accurately measure, mark out, cut and shape materials/components</p> <p>* accurately assemble, join and combine materials/components</p>

	<p>effects to express their ideas and feelings. *Create collaboratively sharing ideas, resources and skills.</p> <p>*Safely use and explore a variety of materials and techniques, experimenting with colour, design, texture, form and function. *Share their creations, explaining the process they have used</p>					* begin to be resourceful with practical problems	* accurately apply a range of finishing techniques * use techniques that involve a number of steps * be resourceful with practical problems
Evaluate Skills							<ul style="list-style-type: none"> <li>self and peer evaluations</li> <li>detailed notes on:                             <ul style="list-style-type: none"> <li>* the skills used</li> <li>* the quality of finish,</li> <li>*choice of materials.</li> </ul> </li> <li>End evaluation completed but continuous assessment throughout the project to inform decisions.</li> <li>Indicate how problems that arise were solved and how they would improve on their design in the future.</li> </ul>
Key vocabulary		design, create, cut, shape, join, finish, materials, evaluate, improve, product, model, ingredients, healthy, cook, chop, grate, prepare, slice, tools	research, design, design brief, evaluate, strengths, weaknesses, create, cook, cut, slice, peel, chop, mix, present, ingredients, equipment, healthy, ingredients, prepare, taste, flavour, texture, presentation shape, join, finish, materials, equipment, suitability, structure, mechanisms, levers, sliders, concertina mechanism, stable, durable wheels and axels,	Design Evaluate Lever Pulley Pneumatic Syringe Shaduf Connection Mechanism	Plushes Sewing Binca Stitch Carbohydrates	Design Evaluate Prototype Reflect Investigate Mechanism Cam Dowel Toys Connection Saw Measure	Design Evaluate Reflect Investigate Prototype Market Research Connection Mechanism Reflect Investigate Electrical circuit Component Bulb Switch Current Connection Prototype Mechanism Saw Measure Motor Buzzer Seasonal Carbon footprint

Creativity is allowing yourself to make mistakes. Design is knowing which ones to keep.

#adams



Enjoy failure and learn from it. You can never learn from success.

James Dyson

BrainsQuote

Design is not just what it looks like and feels like. Design is how it works.

STEVE JOBS

