

DT Subject curriculum overview and progression of skills/knowledge

EYFS/KS1	Autumn	Spring	Summer
EYFS			
	<ul style="list-style-type: none"> • DT: Using junk modelling to create houses. • Making Christmas Shortbreads • Recipe, sieving, weighing 	<ul style="list-style-type: none"> • DT: Pancake day – make pancakes; learning about recipes, weighing out ingredients, food safety • Easter nests cakes = melting chocolate, using a recipe, food hygiene 	<ul style="list-style-type: none"> • DT: Building boats – floating and sinking, linking to science. • Healthy Wraps • Fruit Kebabs • Healthy, fruit, vegetables <p>Key skills and knowledge: Can children use what they have learned about media and materials in original ways, thinking about uses and purposes?</p>
Year 1			
	<p><u>NC objectives</u></p> <p>Design purposeful, functional, appealing products for themselves and other users based on design criteria. Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>Evaluate their ideas and products against design criteria.</p> <p>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p> <p><u>Tasks/knowledge</u></p> <p>Design purposeful, functional & appealing products.</p> <p>Generate, model & communicate ideas.</p> <p>Use range of tools & materials to complete practical tasks.</p> <p>Can they use tools safely?</p>	<p><u>NC objectives</u></p> <p>Design purposeful, functional, appealing products for themselves and other users based on design criteria. Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>Evaluate their ideas and products against design criteria.</p> <p>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p> <p><u>Tasks/knowledge</u></p> <p>Design purposeful, functional & appealing products.</p> <p>Generate, model & communicate ideas.</p> <p>Use range of tools & materials to complete practical tasks (creating animal habitats).</p>	<p><u>NC objectives</u></p> <p>Design purposeful, functional, appealing products for themselves and other users based on design criteria. Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>Evaluate their ideas and products against design criteria.</p> <p>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p> <p><u>Tasks/knowledge</u></p> <p>Design purposeful, functional & appealing products.</p> <p>Generate, model & communicate ideas.</p> <p>Use range of tools & materials to complete practical tasks.</p>

	<p>Evaluate existing products and own ideas. Build and improve structure and mechanisms. Understand where food comes from through cooking opportunities. Apple pies. Research picture frames. Can they identify the key features of an existing product? Design a picture frame. Make a picture frame. Evaluate picture frame. The three little pigs ~ Design a house. Build a house. Test house to see if we can blow it down.</p> <p><u>Key Skills</u> (Topic) Think of some ideas of their own. They use pictures and words to plan.</p> <p>They talk about their own work and things that other people have done. They explain what they are making.</p> <p>Cut food safely. Wash their hands and make sure that surfaces are clean. Think of interesting ways of decorating food they have made, eg, cakes. Describe the materials using different words. Cut materials using scissors. Make a structure/model using different materials. Make their model stronger if it needs to be.</p>	<p>Evaluate existing products and own ideas. Build and improve structure and mechanisms (Katie Morag take home project). Understand where food comes from through cooking opportunities (shortbread biscuits).</p> <p><u>Key Skills</u> Talk with others about how they want to construct their product. Select appropriate resources and tools for their building projects. Can they plan an outcome through pictures with labels? Describe how different textiles feel. Can they describe the materials using different words? Make a product from textiles by gluing. Can they group fabrics and threads by colour and texture? Can they identify when patterns are used in textile design? Explain what they want to do. Explain which tools they are using. Can they select the appropriate resources and tools?</p> <p>Tasks/Topics – Katie Morag Day Design a building for the island of Katie Morag. Cooking – shortbread biscuits linked to the topic Cook Scottish biscuits Design a landmark/object that you would like to put on the island.</p>	<p>Evaluate existing products and own ideas. Can they identify success and next steps? Build and improve structure and mechanisms. Understand where food comes from through cooking opportunities (healthy ice lollies and afternoon tea).</p> <p><u>Key Skills</u> Talk with others about how they want to construct their product. Select appropriate resources and tools for their building projects. They say why they have chosen moving parts. Make a product which moves. Explain what they want to do. Explain which tools they are using. Describe how something works. Can they describe how their products works?</p> <p>Tasks/Topics Punch and Judy – design, create and evaluate their own puppet. Children to make their own Ice cream sundae.</p>
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	Make simple plans before making objects, e.g. drawings, arranging pieces of construction before building.	Pancake Art - design and make.	
Year 2			
	<p>NC objectives</p> <p><i>Design</i></p> <ul style="list-style-type: none"> - 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 <p><i>Make</i></p> <ul style="list-style-type: none"> - 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 <p><i>Evaluate</i></p> <ul style="list-style-type: none"> - Explore and evaluate a range of existing products. - Evaluate their ideas and products against design criteria <p><i>Technical knowledge.</i></p> <ul style="list-style-type: none"> - Build structures, exploring how they can be made stronger, stiffer and more stable. - Explore and use mechanisms in their products. <p><i>Cooking</i></p> <ul style="list-style-type: none"> - Use the basic principles of a healthy and varied diet to prepare dishes - Understand where food comes from. 	<p>NC objectives</p> <p><i>Design</i></p> <ul style="list-style-type: none"> - 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 <p><i>Make</i></p> <ul style="list-style-type: none"> - 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 <p><i>Evaluate</i></p> <ul style="list-style-type: none"> - Explore and evaluate a range of existing products. - Evaluate their ideas and products against design criteria <p><i>Technical knowledge.</i></p> <ul style="list-style-type: none"> - Build structures, exploring how they can be made stronger, stiffer and more stable. - Explore and use mechanisms in their products. <p><i>Cooking</i></p> <ul style="list-style-type: none"> - Use the basic principles of a healthy and varied diet to prepare dishes - Understand where food comes from 	<p>NC objectives</p> <p><i>Design</i></p> <ul style="list-style-type: none"> - 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 <p><i>Make</i></p> <ul style="list-style-type: none"> - 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 <p><i>Evaluate</i></p> <ul style="list-style-type: none"> - Explore and evaluate a range of existing products. - Evaluate their ideas and products against design criteria <p><i>Technical knowledge.</i></p> <ul style="list-style-type: none"> - Build structures, exploring how they can be made stronger, stiffer and more stable. - Explore and use mechanisms in their products. <p><i>Cooking</i></p> <ul style="list-style-type: none"> - Use the basic principles of a healthy

	<p>Tasks/Knowledge Paddington's adventures London Landmarks - Joining materials in different ways Diva Lamps – R.E link - Developing own ideas from initial starting points Can they generate ideas through comparing existing products? Knowledge; Know that salt dough/clay is a good material for a candlelight, as it can withstand low levels of heat. Making Bread – linked to the Great Fire of London topic Key Skills Can they measure an amount of a textile?</p>	<p>Tasks/Knowledge Explorers – local areas Pop-up book - Plan and analyse the best materials to make an item. - Joining things in different ways Can they bond fabrics together? - Evaluate and explain what went well around the project and what they would change next time. - Add some kind of design to their product. Knowledge; Know that spilt pins and paper clips are good ways of joining materials so that other parts can still move. Key Skills Can they build an image using fabrics? Dehydrated food – linked to topic of explorers</p>	<p>and varied diet to prepare dishes - Understand where food comes from</p> <p>Tasks/knowledge Around the world in 80 days Bug hotels. - Describe their design by using pictures, diagrams, models and words. Can they create an innovative product? - Make sensible choices as to which material to use for their constructions. - Develop their own ideas from initial starting points. - Incorporate some type of movement into models. - Consider how to improve their construction. If they did it again, can they explain what they would improve? Knowledge; Know that a pulley can be created by adding tension to something, Key Skills Can they create a large-scale textile or sculpture piece through class collaboration? Stir fry/fried rice - Discuss and plan principles of a healthy diet - Prepare and cook a variety of savoury dishes using a range of cooking techniques.</p>
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			Knowledge; Know that fresh food often has to be prepared before it can be cooked.
Year 3/4			
Cycle A	<p>Create a model Roman chariot Pitta pizzas</p> <p>Developing, Planning and Communicating Ideas:</p> <ul style="list-style-type: none"> • Design to meet a range of requirements and explain to others. Can they plan their design using accurate diagrams and information? • Step-by-step plan Can they start to order the main stages of making their product? • Use accurately labelled sketches. • Suggest improvements. <p>Working with tools, equipment, materials and components to make quality products:</p> <ul style="list-style-type: none"> • Use equipment and tools accurately. • Good level of expertise. <p>Evaluation processes and products:</p> <ul style="list-style-type: none"> • Explain what they have changed in their design to make it better. • Evaluate their product both in appearance and the way it works. <p>Stiff and flexible sheet materials:</p> <ul style="list-style-type: none"> • Use appropriate materials • Measure carefully • Work accurately to make cuts and holes. • Join materials. 	<p>African one pot cooking (Ingredients) African drums</p> <p>Developing, Planning and Communicating Ideas:</p> <ul style="list-style-type: none"> • Design to meet a range of requirements and explain to others. • Step-by-step plan Can they identify a design criterion and establish a purpose/audience for their product? • Use accurately labelled sketches. • Suggest improvements. <p>Working with tools, equipment, materials and components to make quality products:</p> <ul style="list-style-type: none"> • Use equipment and tools accurately. Can they manipulate materials effectively using a range of tools and equipment? • Good level of expertise. <p>Evaluation processes and products:</p> <ul style="list-style-type: none"> • Explain what they have changed in their design to make it better. • Evaluate their product both in appearance and the way it works. <p>Cooking and nutrition</p> <ul style="list-style-type: none"> • Choose the right ingredients • Use equipment safely. 	<p>Rainforest interactive pop up book and shortbread shapes</p> <p>Developing, planning and communicating ideas:</p> <ul style="list-style-type: none"> • Take account of the ideas of others when designing • Produce a plan and explain it to others • Put together a step-by-step plan which shows the order and also what equipment and tools they need. • Describe their design using an accurately labelled sketch and words • How realistic is the plan <p>Working with tools, equipment, materials and components to make quality products:</p> <ul style="list-style-type: none"> • Show a good level of expertise when using a range of tools and equipment • Good level of expertise. Can they start to think about their ideas as they make progress and be willing to make changes if this helps them to improve their work? <p>Evaluating processes and product</p> <ul style="list-style-type: none"> • Alter the product after checking it • Try out new and different ideas

	<p>Knowledge To use an axle To join separate parts together</p>	<ul style="list-style-type: none"> Describe how they combine ingredients. <p>Mouldable materials</p> <ul style="list-style-type: none"> Use a range of advanced techniques to shape and mould. Use finishing techniques, showing an awareness of audience. <p>Knowledge: To deconstruct and name parts of a Djembe drum and recreate a small scale version</p>	<p>Electrical and mechanical components</p> <ul style="list-style-type: none"> Explain what has been changed which made their design even better Use mechanical and electrical components. Can they use a range of components? E.g., levers, linkages and pneumatic systems Alter their product after checking it. Can they use finishing techniques? E.g., sanding, varnishing, glazing etc Try out new and different ideas <p>Knowledge: To understand sliders, pop ups, split pin wheels and other interactive features</p>
<p>Cycle B</p>	<p>Punch and Judy Puppets: Mini Victoria Sandwich Developing, planning and communicating ideas</p> <ul style="list-style-type: none"> Come up with at least one idea about how to create their product. Take account of the ideas of others when designing. Produce a plan and explain it to others. Suggest some improvements and say what was good and not so good about their original design. <p>Working with tools, equipment, materials and components to make quality products:</p>	<p>Viking Purses Cheese Biscuits</p> <p>Developing, planning and communicating ideas: · Show that their design meets a range of requirements · Put together a step-by-step plan which shows the order and also what equipment and tools they need · Describe their design using an accurately labelled sketch and words · Choose textiles both for their appearance and also qualities · Think about what the user would want when choosing textiles · Consider how to make their product strong · Devise a template · Explain how to join things in a different way</p> <p>Textiles · Join textiles of different types in different ways. · Choose textiles both for their appearance and also qualities.</p>	<p>Design and Make a Stone age pot Mini Summer Puddings</p> <p>Developing, planning and communicating ideas:</p> <ul style="list-style-type: none"> Design to meet a range of requirements and explain to others. Step-by-step plan Use accurately labelled sketches. Suggest improvements. <p>Working with tools, equipment, materials and components to make quality products:</p> <ul style="list-style-type: none"> Identify if their finished product is going to be good quality. Be conscience of the need to produce something that will be liked by others. Show a good level of expertise when using a range of tools and equipment. <p>Evaluating processes and products</p>

	<ul style="list-style-type: none"> • Identify if their finished product is going to be good quality. • Be conscience of the need to produce something that will be liked by others. • Show a good level of expertise when using a range of tools and equipment. <p>Can they measure, cut and assemble accurately?</p> <ul style="list-style-type: none"> • Work on their product even though their original idea might not have worked. <p>Evaluating processes and products</p> <ul style="list-style-type: none"> • Evaluate a product, thinking of both appearance and the way it works. • Take time to consider how they could have made their idea better. <p>Stiff and flexible sheet materials</p> <ul style="list-style-type: none"> • Measure carefully so as to make sure they have not made mistakes. • Attempt to make the product strong. <p>Knowledge: to explain what a Punch and Judy show is. To create a template for a puppet costume and produce this from fabric (using glue)</p>	<ul style="list-style-type: none"> • Think what the user would want when choosing textiles. • Make the product strong. • Devise a template. • Explain how to join things in a different way. <p>Stiff and flexible sheet materials: • Measure carefully Attempt to make their product strong</p> <p>Knowledge: how to thread a needle, sewing using running stich, tying off a thread.</p>	<ul style="list-style-type: none"> • Evaluate a product, thinking of both appearance and the way it works. • Take time to consider how they could have made their idea better. <p>Knowledge: Know how to mould clay into a vessel shape. Decorate in a style consistent with Stone-Bronze Age pottery</p>
Year 5/6			
Cycle A	Design and make a teddy bear for a World War 2 evacuee. NC Objectives - select from and use a wider range of materials and components, including construction materials, textiles and ingredients,	Design and make a 20th Century Toy NC Objectives - apply their understanding of how to strengthen, stiffen and reinforce more complex structures § - understand and use mechanical systems in their products [for example,	Design and make a 3D model of the water cycle NC Objectives - use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at

	<p>according to their functional properties and aesthetic qualities. - 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</p> <p>- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>Key skills and knowledge Do they keep checking that their design is the best it can be? Do they check whether anything could be improved? Can they evaluate appearance and function against the original criteria? Can they use a range of information to inform their design? Can they use market research to inform plans? Can they work within constraints? Do they consider culture and society in their designs? Do they think what the user would want when choosing textiles? How have they made their product attractive and strong?</p> <p>Key Knowledge To know how to sew 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 Key skills and knowledge - Can they refine their</p>	<p>gears, pulleys, cams, levers and linkages] - 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</p> <p>Key skills and knowledge - Can they refine their product after testing it? - Do they consider culture and society in their designs? - Would different resources have improved their product? - Would they need more or different information to make it even better? - Does their product meet all design criteria? Key Knowledge To know how mechanical systems can work. To understand the design process. To know what a 20th century toy looks like.</p>	<p>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 - apply their understanding of how to strengthen, stiffen and reinforce more complex structures - 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.</p> <p>Key skills and knowledge Can they explain why their finished product is going to be of good quality? Can they explain how their product will appeal to the audience? Can they use a range of tools and equipment expertly? views of others to improve their work § - understand how key events and individuals in design and technology have helped shape the world Key skills and knowledge Can they come up with a range of ideas after they have collected information? Do they take a user's view into account when designing? Can they produce a detailed step-by-step plan? Can they justify why the chosen material was the best for the task? Can they justify design in</p>
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	<p>product after testing it? - Do they consider culture and society in their designs? - Would different resources have improved their product? - Would they need more or different information to make it even better? - Does their product meet all design criteria?</p> <p>Key Knowledge To know how mechanical systems can work. To understand the design process. To know what a 20th century toy looks like. pieces and computer-aided design - apply their understanding of how to strengthen, stiffen and reinforce more complex structures - 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</p> <p>Key skills and knowledge Can they explain why their finished product is going to be of good quality? Can they explain how their product will appeal to the audience? Can they use a range of tools and equipment expertly? views of others to improve their work § - understand how key events and individuals in design and technology have helped shape the world Key skills and knowledge Can they come up with a range of ideas after they have</p>		<p>relation to the audience? Key Knowledge: To know the importance of taking consumer feedback into account. To know what a Greek vase is. Can they describe what they do to be both hygienic and safe? How have they presented their product well? Can they evaluate against original design? Can they come up with a range of ideas? Can they explain how their product will appeal to their audience? Do they take a user's view into account when planning? Key Knowledge: To consider measurements and dimensions when designing packaging. To understand why design briefs are set. - 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. stand the design process. Key skills and knowledge Can they explain why their finished product is going to be of good quality? Can they explain how their product will appeal to the audience? Do they check whether anything could be improved? Can they evaluate appearance and function against the original criteria? Can they justify why they selected specific materials?</p> <p>To know what a teddy bear looked like during the World War 2 period. Cooking – war time recipes NC Objectives - Understand and apply the principles of a healthy and varied</p>
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	<p>collected information? Do they take a user's view into account when designing? Can they produce a detailed step-by-step plan? Can they justify why the chosen material was the best for the task? Can they justify design in relation to the audience? Key Knowledge: To know the importance of taking consumer feedback into account. To know what a Greek vase is. Can they describe what they do to be both hygienic and safe? How have they presented their product well? Can they evaluate against original design? Can they come up with a range of ideas? Can they explain how their product will appeal to their audience? Do they take a user's view into account when planning?</p> <p>Key Knowledge: To consider measurements and dimensions when designing packaging. To understand why design briefs are set. - 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. stand the design process.</p> <p>Key skills and knowledge Can they explain why their finished product is going to be of good quality? Can they explain how their product will appeal to the audience? Do they check whether anything could be improved? Can they evaluate appearance and function</p>		<p>diet - Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques - Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. Do they persevere through different stages of the making process? Key knowledge To know what the water cycle is To know how to join materials together To know how to measure and cut accurately.</p>
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	<p>against the original criteria? Can they justify why they selected specific materials?</p> <p>To know what a teddy bear looked like during the World War 2 period.</p> <p>Cooking – war time recipes NC Objectives - Understand and apply the principles of a healthy and varied diet - Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques - Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>		
<p>Cycle B</p>	<p>Masks</p> <p>Can they come up with a range of ideas after they have collected information? Do they take a user’s view into account when designing? Can they produce a detailed step-by-step plan?</p> <p>Key Knowledge: To know the importance of taking consumer feedback into account. To know what a Greek vase is.</p> <p>Design and make Ancient Greek vases. NC Objectives - 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</p>	<p>Design and make Black Country Fruit biscuits and designing gift packaging for Mother’s Day</p> <p>NC Objectives</p> <ul style="list-style-type: none"> - Understand and apply the principles of a healthy and varied diet - Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques - Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. <p>Key skills and knowledge Cooking-local delicacies!</p> <p>Can they describe what they do to be both hygienic and safe?</p> <p>How have they presented their product well?</p> <p>Can they evaluate against original design?</p>	<p>Design and make a recycling bin</p> <p>NC Objectives</p> <ul style="list-style-type: none"> - 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. - 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. <p>stand the design process.</p>

	<p>their functional properties and aesthetic qualities - 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</p> <p>Key skills and knowledge Can they come up with a range of ideas after they have collected information? Do they take a user's view into account when designing? Can they produce a detailed step-by-step plan? Can they justify why the chosen material was the best for the task? Can they justify design in relation to the audience? Key Knowledge: To know the importance of taking consumer feedback into account. To know what a Greek vase is.</p>	<p>Can they come up with a range of ideas?</p> <p>Can they explain how their product will appeal to their audience?</p> <p>Do they take a user's view into account when planning?</p> <p>Key Knowledge: To consider measurements and dimensions when designing packaging. To understand why design briefs are set.</p>	<p><u>Key skills and knowledge</u></p> <p>Can they explain why their finished product is going to be of good quality?</p> <p>Can they explain how their product will appeal to the audience?</p> <p>Do they check whether anything could be improved?</p> <p>Can they evaluate appearance and function against the original criteria?</p> <p>Can they justify why they selected specific materials?</p> <p>How have they ensured that their work is precise and accurate?</p> <p>Key Knowledge To know what a recycling bin looks like. To understand the design process.</p>
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