BE THE BEST YOU CAN BE

Design and Technology - Skills & Vocabulary Progression Overview

Design and Technology - DESIGNING

Skills	They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology.	Understand what a product is and who it is for Understand how a product works and how it is used Identify where you might find this product Explain what product they will be designing and making Explain who their product will be used by Describe what their product will be used for	Understand what a product is and who it is for Understand how a product works and how it is used Identify where you might find this product Identify the materials used to make the product Express an opinion about the product Use own experiences and existing products to develop ideas Explain what product they will be designing and making Explain who their product will be used by Describe what their product will be used for and how it will work Explain why their product is suitable for the intended user	Identify who made the product, when it was made and what its purpose is Identify what the product has been made from Research facts about famous inventors/ chefs/ designers etc. linked to product Understand and gather information about what a particular group or people want from a product Describe the purpose of their product and how it will work Identify design features that will appeal to intended users Explain how parts of their product works Generate realistic ideas that meet needs of user	Identify who made the product, when it was made and what its purpose is Identify what the product has been made from Research facts about famous inventors/ chefs/ designers etc. linked to product Understand and gather information about what a particular group or people want from a product Describe the purpose of their product Identify design features that will appeal to intended users Explain how parts of their product will work Develop their own design criteria and use for planning ideas Generate realistic ideas and take into account availability of resources	Identify who made the product, when it was made and what its purpose is Identify what the product has been made from and how environmentally friendly the materials are Identify the cost to make the product Research facts about famous inventors/ chefs / designers etc. linked to product Understand and gather information about what a particular group or people want from a product, using questionnaires, surveys etc. Describe the purpose of their product Identify design features that will appeal to intended users Explain how parts of their product will work Develop their own design criteria and use for planning ideas Generate innovative ideas that meet needs of user and take into account availability of resources	Identify who made the product, when it was made and what its purpose is Identify what the product has been made from and how environmentally friendly the materials are Identify the cost to make the product and whether it has any other purposes e.g. Leading innovation of the time, trend setting, etc. Research facts about famous inventors/ chefs/ designers etc. linked to product Understand and gather information about what a particular group or people want from a product, using questionnaires, surveys etc. Describe the purpose of their product Identify design features that will appeal to intended users Explain how parts of their product will work Create a design description for their product Highlight the impact of time, resources and cost within their design ideas Generate innovative ideas that meet needs of user
Key Vocabulary	*Plan Draw Ideas Design Fold Cut Glue Label*	*Plan Prepare Design Materials Tools Ideas Use Model Development Market Research Survey Template*		*Plan Organise Initial ideas Criteria Diagrams Labels Annotate Brief Product Appearance Consumer Customer Target Audience Purpose Application Assemble Illustrate Sketch*		*Plan Organise Prototype Initial ideas Criteria Diagrams Labels Annotate Brief Product Appearance Consumer Customer Target Audience Purpose Application Constraints Client Assemble Illustrate Annotated sketch Innovation*	
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Year 1							
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Design and Technology -MAKING

Skills	They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology.	Discuss what their steps for making could be Represent ideas through talking and drawing Choose suitable tools for making Follow safety and food hygiene procedures Measure, mark, cut and shape materials and components Join, assemble and combine materials and components	Discuss what their steps for making could be Represent ideas through talking, drawing and computing – (where appropriate) Choose materials to use based on suitability of their properties Choose suitable tools for making whilst explaining why they should be used Follow safety and food hygiene procedures Measure, mark, cut and shape materials and components Join, assemble and combine materials and components Use finishing techniques, including skills learnt in Art	Order the main stages of making Choose materials to use based on suitability of their properties Choose suitable tools for making whilst explaining why they should be used Use design criteria whilst making Follow safety and food hygiene procedures Measure, mark, cut and shape materials and components with some accuracy Join, assemble and combine materials and components with some accuracy Use finishing techniques, including skills learnt in Art with some accuracy	Order the main stages of making Choose materials to use based on suitability of their properties Choose suitable tools for making whilst explaining why they should be used Use design criteria whilst making Follow safety and food hygiene procedures - Measure, mark, cut and shape materials and components with some accuracy Join, assemble and combine materials and components with some accuracy Use finishing techniques, including skills learnt in Art with some accuracy Create pattern pieces and prototypes	Record a step by step plan for making Produce lists for the tools, equipment and materials they will be using Choose materials to use based on suitability of their properties and aesthetic qualities Choose suitable tools for making whilst explaining why they should be used Use design criteria whilst making Follow safety and food hygiene procedures Measure, mark, cut and shape materials and components accurately Join, assemble and combine materials and components accurately Demonstrate problem solving skills when encountering a mistake or practical problem Use finishing techniques, including skills learnt in Art accurately Create pattern pieces and prototypes	Record a step by step plan for making Produce lists for the tools, equipment and materials they will be using Choose materials to use based on suitability of their properties and aesthetic qualities Choose suitable tools for making whilst explaining why they should be used Use design criteria whilst making Follow safety and food hygiene procedures Measure, mark, cut and shape materials and components accurately Join, assemble and combine materials and components accurately Demonstrate problem solving skills when encountering a mistake or practical problem Use finishing techniques that involve a number of steps, including skills learnt in Art accurately Create pattern pieces and prototypes
Key Vocabulary	*Make Build Combine Join Shape Tools Safety*	*Fast Slow Faster Slower Up Down Turn Wind up Design Draw Sketch Tools Fix Glue Attach Features Brick Wood Stone Cloth Metal Foam Felt Paper Tissue Newspaper Cardboard String Wool Clay Scissors Glue Tape Cut Stick Decorate Safety*		*Materials Mould Liquid Solid Form Shape Adhesive Lattice Mass-produce Hand-made Packaging Presentation Machine made Durable Assemble Measure Equipment Material Running stitch Blanket stitch Seam Tension Structure Mechanism Pulley Lever Gear Safety*		*Materials Mould Liquid Solid Form Shape Adhesive Lattice Mass-produce Hand-made Packaging Presentation Machine made Dimensions Durable Assemble Measure Equipment Material Running stitch Blanket stitch Seam Tension Structure Mechanism Pulley Lever Gear Safety*	
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Design and Technology - EVALUATING

Skills	They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology.	Talk about their design ideas and what they have made Make simple judgements of how the product met their design ideas	Talk about their design ideas and what they have made Make simple judgements of how the product met their design ideas Suggest how their product could be improved	Use design criteria to evaluate product Identifying both strengths and areas for development Consider the views of others, including intended user, whilst evaluating product	- Use design criteria to evaluate product - identifying both strengths and areas for development - Consider the views of others, including intended user, whilst evaluating product	- Use design criteria to evaluate product, identifying both strengths and areas for development - Consider the views of others, including intended user, whilst evaluating product	- Use design criteria to evaluate product - looking at quality of end product and design and whether it is fit for is intended purpose - Consider the views of others, including intended user, whilst evaluating product
Key Vocabulary	*Change Like Dislike Next time Better Worse Different Instead*	*Change Improve Prefer Useful Unsuccessful Future Progress Modify Alter Adapt Original Finished article Evaluate Graphics*		*Assess Edit Improve Alter Outcome Develop Test Analyse Advantage Disadvantage Efficiency Challenge Specification Sustainability*		*Effective Fit for purpose Design criteria Alternatives Models Quality Function Functionality Challenge Specification Sustainability*	
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TECHNICAL KNOWLEDGE							
Skills	They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology.	Explaining what I am making and which tools I am using 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 Selecting appropriate tools, techniques and materials and explain my choice		Choosing appropriate tools, equipment, components and techniques to make functional products Applying technical knowledge and understanding of the nature of materials to cut, shape and join them with some accuracy Applying 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] Applying understanding of computing to program, monitor and control their products.	
Key Vocabulary	Complete Product Final Design	*Complete Product Final Materials Mix Texture Design Structures Mechanisms Product*		*Textile Texture System Scale Design brief Mass Weight Design Structures Mechanisms Product Reinforce strengthen Technique*		*Durable Transparent Translucent Stiff Rigid Malleable Padding Hinge Pivot Textile Texture System Scale Design brief Mass Weight Load Tension*	
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COOKING AND NUTRITION

Skills	They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology.	Understand that food comes from plants or animals Understand that food has to be farmed, caught, or grown Sort foods into the 5 groups using The Eatwell Plate Identify that people should eat at least 5 portions of fruit and vegetables a day Prepare simple dishes hygienically and safely without a heat source Use cooking techniques such as: cutting, peeling and grating	Understand which foods are reared, caught, or grown and that this happens in the UK and across the globe Understand that recipes can be changed by adding or taking away ingredients Understand that the seasons can affect food produce Sort foods into the 5 groups using The Eatwell Plate and identify that this makes up a healthy diet Identify that food and drink are needed to provide energy for a healthy and active lifestyle Identify that people should eat at least 5 portions of fruit and vegetables a day Understand which foods are reared, caught, or grown and that this happens in the UK and across the globe Understand that the seasons can affect food produce Understand that sometimes raw ingredients need to be processed before they can be used in cooking (e.g. De -feathering a chicken) Understand that recipes can be adapted to change the appearance, taste and aroma of a dish Sort foods into the 5 groups using The Eatwell Plate and identify that this makes up a healthy diet Identify that food and drink provide certain nutritional and health benefits which support a healthy lifestyle Prepare simple dishes hygienically and safely, where needed with a heat source Use cooking techniques such as: chopping, peeling, grating slicing, mixing, spreading, kneading and baking	Understand which foods are reared, caught, or grown and that this happens in the UK and across the globe Understand that the seasons can affect food produce Understand that sometimes raw ingredients need to be processed before they can be used in cooking (e.g. De -feathering a chicken) Understand that recipes can be adapted to change the appearance, taste and aroma of a dish Sort foods into the 5 groups using The Eatwell Plate and identify that this makes up a healthy diet Identify that food and drink provide certain nutritional and health benefits which support a healthy lifestyle
Key Vocabulary	Healthy Unhealthy Source Fruit Vegetables Clean Wash Safe Dirty Unsafe Cook Cut Chop Pour	*Healthy Unhealthy Source Fruit Vegetables Clean Wash Safe Dirty Unsafe Amount Ingredients Recipe Weight Nutrients Vegetarian Dietary requirements Utensils Sprinkle Cut Cook Whisk Stir Mix Pour*	*Healthy Unhealthy Balanced Vitamins Disease Nutrition Healthy eating Hygiene Diet Grams Storage Presentation Taste Texture Flavour Sift Weigh Pour Slice Blend Melt Heat Grate, Knead Sprinkle Crumble*	*Healthy Unhealthy Balanced and Unbalanced diets Vitamins Disease Nutrition Disinfect Bacteria Cross contamination Healthy eating Hygiene Diet Grams Storage Presentation Taste Texture Flavour Sift Weigh Pour Slice Blend Melt Heat Grate, Knead Sprinkle Crumble*
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