

Design & Technology Progression Grid



| | F1 | F2 | Y1 | Y2 |
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| Knowledge | Identify a range of tools | Know what task each tool can be used for. | <p><i>Build structures, exploring how they can be made stronger, stiffer and more stable.</i></p> <p><i>Explore and use mechanisms, e.g. levers, sliders, wheels and axles, in their products.</i></p> <p>Can understand and explain why they have chosen a particular tool for a task.</p> <p>Understands and Describes how an existing product works (e.g. 'the toy moves when I turn the handle'). Describe others' work, including work by professional craftspeople and designers and say what they like and dislike about it.</p> <p>Explain how to keep safe during a practical task.</p> <p>Explain how they would fix simple products.</p> <p>Identify and talk about products that use electricity to make them work.</p> <p><u>Food & Nutrition</u></p> <p>Identify the main food groups, including fruit and vegetables.</p> <p>Identify the source for common foods.</p> | <p><i>Build structures, exploring how they can be made stronger, stiffer and more stable.</i></p> <p><i>Explore and use mechanisms, e.g. levers, sliders, wheels and axles, in their products.</i></p> <p>Select and explain why they have chosen a particular tool for a task and explain the safety considerations</p> <p>Can describe why a design, building or designer is important.</p> <p>Understand how to create working circuits to light a bulb or work a buzzer.</p> <p><u>Food & Nutrition</u></p> <p>Explain how to work hygienically.</p> <p>Recognise the need for a variety of foods in a diet.</p> <p>Explain where the food they eat comes from (e.g. by referring to countries, counties, animals and plants).</p> |
| Skills | <u>Design</u> | <u>Design</u> | <u>Design</u> | <u>Design</u> |

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| | <p>Develop own ideas & decide which materials to use to express them. Explore how things work - wind up toys, pulleys, cogs Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.</p> <p><u>Make</u> Make imaginative and complex small world, with blocks and construction kits. Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures. Use various construction materials, e.g. joining pieces, stacking vertically and horizontally, balancing, making enclosures and creating spaces Use available resources to create props to support play. Develop new skills & techniques Use tools for a purpose</p> | <p>Develop own ideas and consider / experiment with a range of materials to express their ideas and understanding. Create collaboratively sharing ideas, resources & skills.</p> <p><u>Make</u> Use increasing knowledge & understanding of tools & materials to explore their interests & enquiries & develop their thinking. Create representations both imaginary & real-life. Use different techniques for joining materials Use tools independently, with care & precision</p> <p><u>Evaluate</u> Express & communicates working theories, feelings & understandings Responds imaginatively to art works & objects Return to & build on previous learning, refining ideas & developing their ability to represent them Discuss problems & how they might be solved</p> | <p><i>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.</i> Draw a simple picture of an intended design with basic labelling. With help, put ideas into practice. Work as part of a class to solve simple design problems. Begin to assess the usefulness of a range of materials according to their characteristics.</p> <p><u>Make</u> <i>Select from and use a range of tools and equipment to perform practical tasks e.g. 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.</i> Cut out shapes from a range of fabrics and papers. Fold, tear, roll and cut paper and card. Cut accurately and safely with scissors. Join appropriately, using glue or tape. Build simple structures. Use wheels, axles, levers and sliders.</p> | <p><i>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.</i> Produce detailed, labelled drawings or models of products based on design criteria. Think of ideas and plan what to do next, based on their experience of working with materials and components. Investigate a range of existing products and say if they do what they are supposed to do.</p> <p><u>Make</u> <i>Select from and use a range of tools and equipment to perform practical tasks e.g. 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.</i> Use tools safely for cutting and joining materials and components. Work safely and hygienically in construction and cooking activities.</p> |
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| | <p><u>Evaluate</u> Notice what other children & adults do, mirroring what is observed, adding variations & then doing it spontaneously</p> <p><u>Food & Nutrition</u> • Talk about the differences between materials & changes they notice • Make healthy choices</p> | <p><u>Food & Nutrition</u> Look closely at similarities, differences, patterns & change Know & talk about the different factors that support their overall health & well-being</p> | <p>Generate, develop, and communicate their ideas through discussion, drawings and models. Demonstrate the ability to use simple tools and equipment to perform practical tasks.</p> <p><u>Evaluate</u> <i>Explore and evaluate a range of existing products</i> <i>Evaluate their ideas and products against design criteria.</i></p> <p>Talk about their own and others' work identifying strengths or weaknesses. Begin to review ideas based on feedback from others Begin to explore and evaluate existing products. Begin to evaluate ideas and products against design criteria. Begin to interpret design criteria so that products are purposeful, functional and appealing</p> <p><u>Food & Nutrition</u> Measure and weigh food items using non-standard measure (e.g. spoons and cups).</p> | <p>Cut, measure, form and shape materials to fix or repair something, explaining objectives. Join fabrics using running stitch, glue, staples, over sewing and tape. Create simple hinges and pop-ups using card Cut wood/dowel using a bench hook and hacksaw. Attach features to a vehicle (e.g. an axle and wheels or a sail and rudder). Join appropriately, with glue and /or tape, for different materials and situations. Create and use wheels and axles, levers and sliders.</p> <p><u>Evaluate</u> <i>Explore and evaluate a range of existing products</i> <i>Evaluate their ideas and products against design criteria.</i></p> <p>Explain how closely, finished products, meet their design criteria and say what they could do better in the future. Improve structures by making them stronger, stiffer and more stable. Describe similarities and differences between own and others' work including work by professional craftspeople and designers.</p> <p><u>Food & Nutrition</u> Cut, peel, grate and chop a range of ingredients to make dishes from other countries.</p> |
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| Vocabulary | <p>Design & technology Material Join Tools Safely Cut Roll Tear fold</p> <p>Food & Nutrition Healthy Un healthy clean</p> | <p>Design & technology Design Make Compare Different Stronger Wheels Model Shape Materials Technique Texture Construct - Build Model Shape Structure Tools Design Assemble Materials Assemble Join Build Balance Food & Nutrition Measure weigh utensils equipment</p> | <p>Design & technology Product Evaluate Designer Axle Lever Slider Structure Mechanism Product Pivot Slot Fabric Template function Food & Nutrition Prepare Surface Hygiene Food Type Farmed Manufactured</p> | <p>Design & technology Criteria joining and finishing techniques • Components • Template • Pattern Vehicle • Wheel • Axle • Axle holder • Chassis • Motion Structure • Weak • Strong • Framework • Folding • Rolling Food & Nutrition Food groups - fruit and vegetables, carbohydrates, protein Vegetarian Hygenic • Ingredients • Appealing • Variety • Food groups • Balanced • healthy</p> |
| Books | | | | |
| Resources | Range of construction equipment Craft Station with range of materials and fixing | Construction equipment incl smaller more complex equipment Craft station with range of materials and fixing | Construction equipment incl smaller more complex equipment Craft station with range of materials and fixing resources (different types of glue and tape) | Construction equipment incl smaller more complex equipment Craft station with range of materials and fixing resources (different types of glue and tape) |

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| | resources (glue and masking tape) scissors | resources (different types of glue and tape) Wheels scissors | Wheels and axles Split pins for moving parts Plastic needle and thread Scissors and hole punch | Wheels and axles Pulley Needle and thread Range of tools to score and put accurate holes in different materials |
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