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**Progression of Knowledge and Skills in Design and Technology**

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|  | **Design**  Design products based on design criteria. Generate, develop, model and communicate ideas. | **Make**  Select from and use a range of tools and equipment to perform practical tasks. Select from and use a wide range of materials and components. | **Evaluate**  Explore and evaluate a range of existing products.  Evaluate their ideas and products against design criteria. | **Technical Knowledge**  Build structures and make them stronger, stiffer and more stable. Explore and use mechanisms. | **Food and Nutrition**  Use the basic principles of healthy and varied diet to prepare dishes. Understand where food comes from. |
| **Year R** | * Use full sentence structures to communicate ideas and indicate future possibilities * Explore and use a variety of mark-making tools to communicate meaning * Suggest and try out ideas in response to construction challenges e.g. to design a getaway vehicle for the Evil Pea * Begin to show accuracy and care when drawing (ELG) * Experiment with design (ELG) | * Use a range of small tools, including scissors, paintbrushes, cutlery and clay tools. * Explore a range of construction materials including kits, junk, blocks and large scale loose parts * Use construction kits to build walls, towers and frameworks * Explore and use different fabrics * Explore and use a range of cutting and joining techniques including taping, gluing, treasury tagging and stapling * Create products collaboratively sharing ideas, resources and skills * Safely use and explore a variety of materials, tools and techniques (ELG) | * Take inspiration from products and create their own products in response. * Begin to identify their own strengths and those of others. * Be happy to have another go if they are not successful the first time they attempt a task * Return to and build on their previous learning, refining ideas and developing their ability to represent them * Share their creations, explaining the process they have used (ELG) | * Share their ideas and pose their own questions about why things happen and how things work. * Explore and use mechanisms within construction kits e.g. wheels and axles, gears * Experiment with form and function (ELG) | * Understand the need to wash hands before touching food * Identify dangers in the kitchen * Understand the need to wash some food before using * Understand why we need to keep the kitchen clean * Use simple utensils e.g. wooden spoon, sieve, whisk, and dinner knife safely and with   control when cooking   * Develop simple food preparation skills including mixing, cutting, spreading, rolling and cutting out * Begin to develop an awareness of where food comes from through sharing texts and rich experiences e.g. farm visit, growing cress * Discuss healthy food choices * Sort healthy food from less nutritional food * Understand the importance of healthy food choices (ELG) |
| **Year 1** | **Preparing fruit**   * Design an appealing fruit dish for a particular user based on simple design criteria * Generate initial ideas and design criteria through investigating a variety of fruit * Communicate these ideas through talk and drawings   **Sliders and levers**   * Generate ideas based on simple design criteria and their own experiences, explaining what they could make * Develop, model and communicate their ideas through drawings and mock-ups with card and paper   **Templates and joining techniques**   * Design a functional and appealing product for a chosen user and purpose based on simple design criteria * Generate, develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and ICT | **Preparing fruit**   * Use simple utensils and equipment to cut, slice, squeeze and chop safely * Select from a range of fruit according to their characteristics e.g. colour, texture and taste to create a fruit dish   **Sliders and levers**   * Plan by suggesting what to do next * Select and use tools, explaining their choices, to cut, shape and join paper and card * Use simple finishing techniques suitable for the product they are creating   **Templates and joining techniques**   * Select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing * Select from and use textiles according to their characteristics | **Preparing fruit**   * Taste and evaluate a range of fruit to determine the intended user’s preferences * Evaluate ideas and finished products against design criteria   **Sliders and levers**   * Explore a range of existing books and everyday products that use simple sliders and levers * Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets design criteria   **Templates and joining techniques**   * Explore and evaluate a range of existing textile products (puppets) * Evaluate their ideas throughout and their final products against original design criteria | **Preparing fruit**   * Know and use technical and sensory vocabulary relevant to the dish   **Sliders and levers**   * Explore and use sliders and levers * Understand that different mechanisms produce different types of movement * Know and use technical vocabulary relevant to the product   **Templates and joining techniques**   * Design a functional and appealing product for a chosen user and purpose based on simple design criteria * Generate, develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and ICT | **Preparing fruit**   * Understand where a range of fruit come from e.g. farmed or grown at home * Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of *The Eatwell Guide* |
| **Year 2** | **Freestanding structures**   * Generate ideas based on simple design criteria and their own experiences, explaining what they could make * Develop, model and communicate their ideas through talking, mock-ups and drawings   **Wheels and axles**   * Generate initial ideas and simple design criteria through talking and using own experiences * Develop and communicate ideas through drawing and mock-ups   **Preparing vegetables**   * Design an appealing vegetable dish for a particular user based on simple design criteria * Generate initial ideas and design criteria through investigating a variety of vegetables * Communicate these ideas through talk and drawings | **Freestanding structures**   * Plan by suggesting what to do next * Select and use tools, skills and techniques, explaining their choices * Select new and reclaimed materials and construction kits to build their structures * Use simple finishing techniques suitable for the structure they are creating   **Wheels and axles**   * Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing * Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics   **Preparing vegetables**   * Use simple utensils and equipment to peel, cut, slice, grate and chop safely * Select from a range of vegetables according to their characteristics e.g. colour, texture and taste to create a vegetable dish | **Freestanding structures**   * Explore a range of existing freestanding structures in the school and local environment e.g. everyday products (beds – toy and real) * Evaluate their product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria   **Wheels and axles**   * Explore and evaluate a range of products with wheels and axles * Evaluate their ideas throughout and their products against original criteria   **Preparing vegetables**   * Taste and evaluate a range of vegetables to determine the intended user’s preferences * Evaluate ideas and finished products against design criteria, including intended user and purpose | **Freestanding structures**   * Know how to make freestanding structures stronger, stiffer and more stable * Know and use technical vocabulary relevant to the product (bed)   **Wheels and axles**   * Explore and use wheels, axles and axle holders * Distinguish between fixed and freely moving axles * Know and use technical vocabulary relevant to the product   **Preparing vegetables**   * Know and use technical and sensory vocabulary relevant to the dish | **Preparing vegetables**   * Understand where a range of vegetables come from e.g. farmed or grown at home * Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of *The Eatwell Guide* |