 Design & Technology: Skills Progression Year One

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|  | **Autumn** | **Spring** | **Summer 1** | **STEM Week** | **Additional Projects** |
| **Year 1** | **How scary should a calendar be?** | **Which parts of your picture should move?** | **Which fruits would be good in your salad?** | **What can you learn from a Textile Tree?** |  |
| **BIG task details** | design and make a calendar illustrated with monsters, one for each month of the year. -designed and produced by a team of children using software. The calendar will be made to meet the preferences of the users who might be the class themselves or some other group in the school | design and make a  moving picture that tells a nursery rhyme or a simple story using paper, card, found pictures, found materials and paper fasteners. | design and make a bowl of fruit salad to share with the other children in the class. The  look, feel and taste of the fruit salad should match the requirements of the  group as revealed by their own research and recorded in their specification. | design and make a  simple tree structure using a variety of textiles, paper and card. The children will  also make textile sample cards to hang on the tree so that it becomes a learning resource for the whole class. |  |
| **Small tasks** | **focused practical tasks**  **2**  1 Investigating calendars  2 Looking at monsters  3 Experimenting with the software  4 Writing the specification | **focused practical tasks**  1 Investigating pictures  2 Making pictures  3 Making a lever mechanism  4 Making a wheel mechanism  5 Writing the specification | **focused practical tasks**  1 Introducing fruit  2 Tasting and smelling fruit  3 Learning to use tools  4 Making fruit taste and look better  5 Writing the specification | **focused practical tasks**  1Exploring materials  2 Relating textiles to their uses  3 Learning to wrap and manipulate  Textiles    4 Learning to make textile teaching  cards  5 Writing the specification |  |
| **Vocabulary** | calendar, months of the monster, scary, friendly, computer software, screen, **design specification**,  year, days of the week eye, mouth, teeth, antennae, save, select, drag and drop, team, **make**, **evaluation,**,arm, leg, wings, tail **re-size**, turn **improve** | picture image, speech bubble **mechanism, lever, pivot, wheel, disk, centre**  paper fastener, curve bigger, smaller, **design** **specification, evaluation** | fruit, fruit juice, fruit salad, frozen, words to describe taste: playdough, **flatten,** mash, skin, peel, pips,  dried, canned, taste, texture, colour, sweet, sour, bitter, tangy, **spread, scoop, slice**, stones, core, **estimate,**  apple, banana, cherry, grape, sharp; words to describe **handle, blade, edge,** **specification,**  texture: soft, smooth, firm, **bowl (of spoon)** **prongs ingredients, measure,**  chewy, crunchy, crisp, (of fork), smoothly, lumpy **compare, evalute,** spreading, cutting , holding steady | rough/smooth  stiff/bendy  warm/cool  shiny/dull  rough/bobbly/smooth  **open weave/close**  **weave**  **natural, synthetic**, blend  flexible, warm, **wrap,** paperclip, **design specification**,  cotton, wool, foil, net, linen, **waterproof**, strong, **fasten,** teaching branch, twig, tree,  cardboard, metal, sandpaper – **textile**, cloth, soft, rough, card, loop, glue, sort, **evaluate, fabric,** **material** comfortable **sample** |  |
| **Tools** | pens, pencils, scissors, hole punch, stapler.  computer, graphics package, colour printer. | scissors, pencils, hole punch, glue sticks, felt tip pens. | cutting board, knife, fork, spoon, cleaning materials for hands and equipment.  plastic knives, forks, and spoons. metal knives, forks and spoons | hole punches, scissors, pencils or felt tip pens, glue, wall stapler, stapler, paper clip |  |
| **Skills: Design, Make , Evaluate** | 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  select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]  explore and evaluate a range of existing products  evaluate their ideas and products against design criteria | 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  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  evaluate their ideas and products against design criteria  explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. | 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  select from and use a range of tools and equipment to perform practical tasks e.g, cutting, shaping,  select from and use a wide range of ingredients, according to their characteristics  explore and evaluate a range of existing products  evaluate their ideas and products against design criteria | 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 and mock ups  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, components and fabrics according to their characteristics  build structures, exploring how they can be made stronger, stiffer and more stable |  |
| **Purposes** | to consider the appearance and  function of calendars;  t about the visual characteristics that  make monsters friendly or scary;  t to make a monster on screen using an  object-based graphics package;  t to use computer software as a design  tool;  t to work as a team in a small group. | t about pictures and what they might contain;  t to make a picture by assembling ready made images;  t to make a lever mechanism to cause movement;  t to make a wheel mechanism to cause movement;  t to choose the mechanism that provides the movement they want for their moving picture. | that a wide variety of healthy fruits can be eaten, some fresh and some dried or processed in other ways  t about the sensory properties of fruit  through their own exploration of  colour, texture and taste;  t about health and safety issues when handling and tasting food;  t how to use everyday cutlery as  effective and versatile tools;  t how to improve the taste, texture and appearance of fruit through different methods of preparation and using  additional ingredients;  t to write a specification working in a team. | t that there are different sorts of  materials including textiles;  t that textiles have different uses;  t simple wrapping techniques;  t to make teaching cards for the class  tree;  t to contribute to a large group task. |  |