 Design & Technology: Skills Progression Year Two

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|  | **Autumn** | **Spring** | **Summer 1** | **STEM Week** | **Additional Projects** |
| **Year 2** | **What should be stuck to your fridge?** | **How will your roly-poly move?** | **Should your software speak?** | **How do you like your toast?** |  |
| **BIG task details** | design a fridge magnet  set that will appeal to young children.What’s different about these fridge  magnets is that each one is made from layers, which will add considerably to their attractiveness. Each table or group of  children will produce one set of fridge magnets and within a group each child will make just one. | design and make a simple push-along toy (a roly poly) using a mixture of found materials, paper and card. The toy should provide amusement in both its appearance and the ways it moves. It may be for the children themselves or for other younger children. | to build a multimedia  software presentation using an authoring program previously introduced during computing  lesson time. The presentation should be attractive and easy to use and should be a source of information for younger children. | write a specification for  toast that meets the identified preferences of a particular person and then make a serving of toast to that specification. |  |
| **Small tasks** | **focused practical tasks**  **2**  1Thinking about fridge magnets  2 Developing ideas for fridge magnets  3 Creating images in layers  4 Writing the specfication | **focused practical tasks**  1 Exploring rolling toys  2 Fixing wheels  3 Exploring faces  4 Exploring body decoration | **focused practical tasks**  1 Investigating existing software  2 Finding out the needs of the audience  3 Exploring the use of text, images and  4 Writing the specification | **focused practical tasks**  1 Exploring toast  2 Doing a simple survey  3 Analysing the survey results  4 Investigating making toast |  |
| **Vocab** | magnet, shape **layer template**, popular , magnetic **finish**, **develop**, **ideas**, **design specification**, **evaluate, survey** | **wheel,** roll, path (of circle, centre, **tube**, features (on a face), wind, glitter  travel), straight, zigzag, bracket, slit, weak, expression (on a face)  up and down, cylinder strong, easy, difficult, **design, idea, specification, evaluate ,product** | educational, information **experiment**, microphone, **design decisions, test, improvement**  audience, **user, evaluate**, authoring **program specification**, content | hot cold dark pale floppy stiff  soft crisp white bread, wholemeal bread, brown preferences, **data**, **popular**, **spinner, specification**,  bread, butter, toaster, timer, grills, **survey**, **evaluation, production**  heat, permanent change, browning **system, consumer** |  |
| **Tools** | Computer, word processing  software, printer  paper, poster paint brushes, felt tips, pencils, treasury tags, thin white card, sharp scissors,  PVA glue, adhesive tape, cocktail sticks or wooden spills  scissors, thick markers, fine  sheet, corrugated card, button magnets, corrugated plastic, single-sided scissors, felt | nails, adhesive tape,  paper fasteners, paper plates, thin card  pencils, scissors  scissors ,hole punch, PVA glue | computer(s), authoring software, microphone(s), digital camera (optional),  scanner (optional), pencils. | electric toaster with an accurate timing mechanism or a cancel mechanism, colouring pencils or crayons in a range of brown shades knives for spreading and cutting, bread board, pincers, computer, printer and simple database program. |  |
| **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, according to their characteristics  evaluate their ideas and products against design criteria  explore and use mechanisms [for example, 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 and information communication  select from and use a range of equipment to perform practical tasks,  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 consumer preference  generate, develop, model and communicate their ideas through talking, drawing, and mock ups  select from and use a range of tools and equipment to perform practical tasks [for example, cutting, spreading, shaping]  select from and use a range of ingredients according to their characteristics  explore and evaluate a range of existing products  evaluate their ideas and products against design criteria |  |
| **Learning purposes** | to develop a product from the stimulus  of a commercial idea;  t to conduct a simple survey of their  class related to fridge magnets;  t to work as a group;  t to think of an image in layers;  t techniques of cutting, joining and  layering paper;  t to use a template;  t to develop simple line images;  t to consider why an image might be popular. | to consider the performance and  appearance of rolling toys for  themselves and younger children;  t about different sorts of rolling motion  and how these can be achieved by  particular arrangements of wheels and  axles;  t three different ways of fixing a tube to  a paper plate;  t about the parts of the human face and how these create expressions;  t to decorate a paper plate so that it resembles a face with a particular  expression;  t to decorate a tube so that it looks  appealing when still and when it is  rotating. | to explore the features that make  software successful;  t to consider the needs of a target  audience;  t to use software tools to design a  screen presentation;  t to write a specification for a group  product;  t to work co-operatively in a small  group. | what happens when breads are  toasted, using sight, smell and touch to experience the changes in the breads;  t to identify consumer preferences;  t to analyse consumer preferences;  t to experiment with different breads,  toasting times and spreads;  t about production systems. |  |