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| **Assessment in Design and Technology Skills and Knowledge** | | |
| **A Year 1 technologist** | **A Year 2 technologist** | **A Year 3 technologist** |
| **DESIGN**  Structures   * I know it is important to have a clear design success criteria. * I can include my own choices and suggestions in a design.   Mechanisms   * I can explain how to change a bridge or guide to control movement. * I can design a moving story book for an audience. * I can design a vehicle that has wheels, axles and axle holders so the wheels can move. * I can make labelled drawings which show movement.   Textiles   * I can use a template to design a puppet. * I can choose suitable materials to create my puppet. | **DESIGN**  Structures   * I can share ideas using sketching and modelling. * I can learn about different types of shapes found in the natural world and in everyday objects.   Mechanisms   * I can create a design criteria for a D.T project. * I can design a moving object, checking the design criteria. * I can design a system to make pushes/pulls. * I can choose suitable materials based on their properties.   Cooking and nutrition   * I can design a healthy meal based on foods which work well together.   Textiles   * I can design a product using a design criteria. | **DESIGN**  Structures   * I can design a castle with features which are appealing. * I can draw and label a castle design using 2D shapes and labelling the 3D shapes.   Mechanisms   * I can think of a design criteria from a design brief. * I can think of ideas using thumbnail sketches and exploded diagrams. * I can learn that different types of drawings are used in design to explain ideas clearly.   Cooking and nutrition   * I can create healthy recipes considering the taste, texture, smell and appearance of the dish.   Textiles   * I can design a template from an existing product. * I can apply my individual style to the design criteria. |
| **MAKE**  Structures   * I can make a stable structure from card, tape and glue. * I can follow instructions to cut and make 2D and 3D shapes. * I can make turbines and axles.   Mechanisms   * I can follow a design to create models that use levers and sliders. * I can change levers and sliders if needed.   Cooking and Nutrition   * I can chop fruit and vegetables safely. * I can identify if a food is a fruit or a vegetable. * I can learn where and how fruits/vegetables grow.   Textiles   * I can cut fabric neatly with scissors. * I can use joining methods to decorate a product. * I can order steps for how to make something. | **MAKE**  Structures   * I can make a structure according to the design criteria. * I can create joins and structures from paper/card and tape.   Mechanisms   * I can make push and pull forces using card for levers and split pins for pivots. * I can change the widths, lengths and thicknesses of card. * I can select materials according to their characteristics. * I can cut parts of my work neatly.   Cooking and Nutrition   * I can slice food safely using the bridge or claw grip. * I can construct a healthy meal that meets a design brief.   Textiles   * I can select and cut fabrics for sewing. * I can decorate a pouch using fabric glue or running stitches. | **MAKE**  Structures   * I can construct a range of 3D geometric shapes using nets. * I can create special features for individual designs. * I can make facades from a range of recycled materials.   Mechanisms   * I can create a system to enable a motion. * I can select materials due based on what they look like and how useful they are. * I can manipulate materials to create different effects by cutting, creasing, folding and weaving.   Cooking and Nutrition   * I know how to prepare a work space to cook safely in. * I can learn the basic rules to avoid food contamination. * I can follow the instructions within a recipe.   Textiles   * I can follow a design criteria to create a cushion * I can select and cut fabrics with ease using fabric scissors. * I can sew a cross stitch to join fabric. * I can decorate fabric using appliqué. |
| **EVALUATION**   * I can think about my finished product, explaining likes and dislikes. * I can look at a range of existing products. * I can evaluate my ideas and work against design criteria. | **EVALUATION**   * I can evaluate how good the stitching on others’ work is. * I can talk about, as a class, the success of their stitching against the success criteria. * I can find parts of my peers’ work and say why I like it. | **EVALUATION**   * I can investigate a range of existing products. * I can evaluate my ideas and products against design criteria. * I can consider the views of others to improve my work. * I can understand how key events and individuals in design and technology have helped shape the world. |

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| **A Year 4 technologist** | **A Year 5 technologist** | **A Year 6 technologist** |
| **DESIGN**  **Structures**   * I can design a structure that is visually pleasing, selecting materials to create the effect I want. * I can build frame structures designed to support weight.   **Mechanisms**   * I can design a shape that reduces air resistance. * I can draw a net to create a structure from. * I can choose shapes that increase or decrease speed as a result of air resistance. * I can personalise my designs.   **Electrical Systems**   * I can design a product based around a specific target audience. * I can create both design and success criteria focusing on individual ideas.   **Cooking and nutrition**   * I can design a recipe/meal, thinking about previous taste testing.   **Textiles**   * I can write a design criteria for a product, explaining the decisions I have made. * I can design a personalised product. | **DESIGN**  **Structures**   * I can design a stable structure that is able to support weight. * I can create a frame structure with focus on triangulation.   **Mechanisms**   * I can design a product which uses a mixture of structures and mechanisms. * I can name each mechanism, input and output accurately. * I can storyboard ideas for a product.   **Cooking and nutrition**   * I can make a traditional recipe. * I can understand that the nutritional value of a recipe changes if you remove, substitute or add ingredients. * I can write a method for a recipe making relevant changes to ingredients. * I can design appealing packaging to reflect a recipe.   **Textiles**   * I can create a suitable cross-stitch template considering the key shapes required. * I can consider proportions of materials. | **DESIGN**  **Structures**   * I can design an outdoor area featuring a variety of different structures. * I can consider how the structures will be used and comment on effective and ineffective designs.   **Mechanisms**   * I can experiment with a range of cams. * I can create a design based on a choice of cam to create a desired movement. * I can understand how linkages change the direction of a force. * I can make things move at the same time.   **Electrical Systems**   * I can design a steady-hand game identifying and naming the mechanisms required. * I can draw a design from three different perspectives. * I can generate ideas through sketching and discussion. * I can model my ideas through prototypes.   **Cooking and nutrition**   * I can write a recipe, explaining: key steps, method and ingredients. * I can include facts and drawings from research undertaken.   **Textiles**   * I can design a product linked to set of design criteria to fit a specific theme. * I can annotate my designs appropriately. |
| **MAKE**  **Structures**   * I can create a range of different shaped frame structures. * I can make a variety of free standing frame structures using different shapes and sizes. * I can select appropriate materials to build a strong structure. * I can reinforce corners to strengthen a structure. * I can create a design whilst following a plan. * I can learn to create different textural effects with materials.   Mechanisms   * I can measure, mark, cut and assemble with even more accuracy. * I can make a model based on a chosen design.   Electrical systems   * I can make a working electrical circuit and switch. * I can use the right equipment to cut and attach materials. * I can make an electrical circuit according to the success criteria.   Cooking and Nutrition   * I can follow a baking recipe. * I can cook safely, following basic hygiene rules. I can change a recipe.   Textiles   * I can make and test a paper template in keeping with the design criteria. * I can measure, mark and cut fabric using a paper template. * I can select a stitch style to join fabric, working neatly. * I can sew small neat stitches. * I can use fastening in a design.   **EVALUATION**   * I can test my final product against the design criteria. * I can decide how many of the criteria should be met so the product is considered successful. * I can suggest changes for improvement in my work. * I can consider the views of others to improve my work. | **MAKE**  **Structures**   * I can make a range of different shaped beam bridges. * I can independently measure and mark wood accurately. * I can select appropriate tools and equipment for tasks. * I can use the correct techniques to saw safely. * I can identify where a structure needs reinforcement and use card corners for support.   Mechanisms   * I can follow a design brief to make a product neatly with focus on accuracy. * I can make mechanisms using sliders, pivots and folds to produce movement. * I can use layers and spacers to hide the workings of mechanical parts for an aesthetically pleasing result.   Electrical systems   * I can make a working circuit. * I can make an electronics greeting card, referring to a design criteria. * I can map out where different components of the circuit will go.   Cooking and Nutrition   * I can cut and prepare food safely. * I can use equipment safely, including knives, hot pans and hobs. * I know how to avoid cross-contamination. * I can follow a step-by-step method carefully to make a recipe.   Textiles   * I can measure, mark, and cut fabric using a paper template. * I can create strong and secure blanket stitches when joining fabric. * I can use applique to attach pieces of fabric decoration.   **EVALUATION**   * I can test my final product against the design criteria. * I can decide how many of the criteria should be met so the product is considered successful. * I can suggest changes for improvement in my work. * I can consider the views of others to improve my work. | **MAKE**  **Structures**   * I can build a range of apparatus structures drawing upon new and prior knowledge of structures. * I can measure, mark and cut wood to create a range of structures. * I can use a range of materials to reinforce and add decoration.   Mechanisms   * I can check the accuracy of the jelutong and dowel pieces required. * I can assemble components accurately to make a stable frame. * I know for the frame to function effectively the components must be cut accurately and the joints of the frame secured at right angles. * I can select appropriate materials based on the joins and the speed at which the glue needs to dry/set.   Electrical systems   * I can make electromagnetic motors and tweak the motor to improve its function . * Constructing a stable base for an electromagnetic game. * I can cut, fold and assemble a net. * I can make and test a circuit.   Cooking and Nutrition   * I can follow a recipe, including using the correct quantities of each ingredient. * I can adapt a recipe based on research. * I can work to a given timescale. * I can independently work safely and hygienically.   Textiles   * I can use a template, pinning panels onto fabric. * I can use marking and cutting fabric accurately. * I can sew a strong running stitch, making small, neat stitches and follow the edge. * I can tie strong knots. * I can attach various objects using thread and adding a secure fastening.   **EVALUATION**   * I can test my final product against the design criteria. * I can decide how many of the criteria should be met so the product is considered successful. * I can suggest changes for improvement in my work. * I can consider the views of others to improve my work. |