Spring 1 Frame Structures

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| National Curriculum Links |
| • Designing  • Carry out research into user needs and existing products, using surveys, interviews, questionnaires and web-based resources.  • Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost.  • Generate, develop and model innovative ideas, through discussion, prototypes and annotated sketches.  Making  • Formulate a clear plan, including a step-by-step list of what needs to be done and lists of resources to be used.  • Competently select from and use appropriate tools to accurately measure, mark out, cut, shape and join construction materials to make frameworks.  • Use finishing and decorative techniques suitable for the product they are designing and making.  Evaluating  •  Investigate and evaluate a range of existing frame  structures.  •  Critically evaluate their products against  design specification, intended user and purpose,  identifying strengths and areas for development,  and carrying out appropriate tests.   * Research key events and individuals relevant to * frame structures. * Technical knowledge and understanding * Understand how to strengthen, stiffen and * reinforce 3 D frameworks. * Know and use technical vocabulary relevant to the * project. |

Spring 2 Computer Aided Design in Textiles

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| National Curriculum Links |
| Designing  • Generate innovative ideas through research including surveys, interviews and questionnaires.  • Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes including using computer-aided design.  • Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.  Making  • Produce detailed lists of equipment and fabrics relevant to their tasks.  • Formulate step-by-step plans and, if appropriate, allocate tasks within a team.  • Select from and use a range of tools and equipment, including CAD, to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost.  Evaluating  • Investigate and analyse textile products linked to their final product.  • Compare the final product to the original design specification.  • Test products with intended user, where safe and practical, and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.  • Consider the views of others to improve their work.  Technical knowledge and understanding  • A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics.  • Fabrics can be strengthened, stiffened and reinforced where appropriate.• Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients.  • Make, decorate and present the food product appropriately for the intended user and purpose. |

Summer 1 Celebrating culture and seasonality

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| National Curriculum Links |
| * Designing * • Generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification. * • Explore a range of initial ideas, and make design decisions to develop a final product linked to user and purpose. * • Use words, annotated sketches and information and communication technology as appropriate to develop and communicate ideas. * Making * • Write a step-by-step recipe, including a list of ingredients, equipment and utensils   • Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients.  • Make, decorate and present the food product appropriately for the intended user and purpose.  Evaluating  • Carry out sensory evaluations of a range of relevant products and ingredients. Record the evaluations using e.g. tables/graphs/charts such as star diagrams.  • Evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements.  • Understand how key chefs have influenced eating habits to promote varied and healthy diets.  Technical knowledge and understanding  • Know how to use utensils and equipment including heat sources to prepare and cook food.  • Understand about seasonality in relation to food products and the source of different food products.  • Know and use relevant technical and sensory vocabulary. |

Summer 2 Cam Slides

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| National Curriculum Links |
| Designing  • Generate innovative ideas by carrying out research using surveys, interviews, questionnaires and web-based resources.  • Develop a simple design specification to guide their thinking.  • Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views.  Making  • Produce detailed lists of tools, equipment and materials. Formulate step-by-step plans and, if appropriate, allocate tasks within a team.  • Select from and use a range of tools and equipment to make products that that are accurately assembled and well finished. Work within the constraints of time, resources and cost.  Evaluating  • Compare the final product to the original design specification.  • Test products with the intended user, where safe and practical, and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.  • Consider the views of others to improve their work.  • Investigate famous manufacturing and engineering companies relevant to the project.  Technical knowledge and understanding  • Understand that mechanical systems have an input, process and an output.  • Understand how cams can be used to produce different types of movement and change the direction of movement.  • Know and use technical vocabulary relevant to the project. |