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 framestructures.•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.
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 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. |