Moss Side Primary School

Key Learning in Design and Technology – Year 4

Design	Make	Evaluate
• Explain the project to the children and establish clearly the design criteria for the product • Investigate similar products to the one to be made to give starting points for a design • Draw/sketch products to help analyse and understand how products are made • Develop more than one design or adaptation of an initial design • Research needs of user • Plan a sequence of actions to make a product • Record the plan by drawing using annotated sketches • Begin to use cross-sectional and exploded diagrams • Use prototypes to develop and share ideas • Think ahead about the order of their work and decide upon tools and materials • Propose realistic suggestions as to how they can achieve their design ideas • Consider aesthetic qualities of materials chosen	• Decide which design idea to develop • Plan the stages of the making process • Cut slots • Cut internal shapes • Select from a range of tools for cutting shaping joining and finishing • Use tools with accuracy • Select from techniques for different parts of the process • Select from materials according to their functional properties • Use appropriate finishing techniques.	• Discuss how well the finished product meets the design criteria of the user. • Identify the strengths and weaknesses of their design ideas in relation to purpose/user • Consider and explain how the finished product could be improved • Investigate key individuals and events in Design and Technology.

Food and Nutrition	Structures
• Develop sensory vocabulary/knowledge using, smell, taste, texture and feel • Analyse the taste, texture, smell and appearance of a range of foods (predominantly savoury) • Follow instructions/recipes • Use a range of cooking techniques • Find out which fruit and vegetables are grown in countries/continents studied in Geography and how they are processed • Weigh and measure using scales • Select and prepare foods for a particular purpose • Work safely and hygienically DT learning covered in Science: • Show awareness of a healthy diet (using the Eatwell plate)	• Develop vocabulary related to the project • Create shell or frame structures. • Strengthen frames with diagonal struts • Make structures more stable by giving them a wide base • Measure and mark square section, strip and dowel accurately to 1cm

Notes for teachers:

Project ideas:

Food

- Seasonal food
- Studying and making food linked to countries studied as part of Topic. Discuss how they are processed and get to us.
- Studying and making food in religious ceremonies
- Bread
- Biscuits

Structures

- Greenhouse
- Emergency shelters
- Bridges

Process for Planning a Project for your class.

Think: Product (What could we make?) Purpose (What is it for?) User (Who is going to use it?) – this will make the "Challenge" for the project

e.g. Design Make and Evaluate a (product) to (purpose) for (user).

How will this fit with your themes/topics/creative curriculum? If it doesn't, consider it as a discrete project.

What context will this project be set in? Consider the examples given in the Programme of Study (NC2014) or your own idea.

Plan what products for evaluation / resources / tools / materials you are going to offer the children, taking account of previous experiences and current learning readiness. Ensure all appropriate Risk Assessments have been undertaken.

Make sure prior learning from D&T and other subject areas is in place. If not, plan specific learning opportunities prior to the project – Focus Tasks.

Plan for inclusion of vocabulary development. Are you going to teach this before beginning the project or during the course of the project?

Plan the questions you will ask the children to encourage the 'iterative process'