



## Key Learning in Design and Technology – KS1 B (odd years)

Design	Make	Evaluate
<ul style="list-style-type: none"> <li>• Explain the project to the children and establish clearly the design criteria for the product</li> <li>• Explore existing products and investigate how they have been made.</li> <li>• Decide how existing products do/do not achieve their purpose.</li> <li>• Use pictures and words to convey what they want to design/make.</li> <li>• Select appropriate technique explaining: First... Next... Last....</li> <li>• Explore ideas by rearranging materials.</li> <li>• Select pictures to help develop ideas.</li> <li>• Use drawings to record ideas as they are developed.</li> <li>• Add notes to drawings to help explanations.</li> <li>• Describe their models and drawings of ideas and intentions</li> </ul>	<ul style="list-style-type: none"> <li>• Propose and decide on an idea for a design to develop.</li> <li>• Discuss their work as it progresses.</li> <li>• Select materials from a limited range that will meet the design criteria.</li> <li>• Select and name the tools needed to work the materials.</li> <li>• Explain what they are making.</li> <li>• Explain which materials they are using and why.</li> <li>• Name the tools they are using.</li> <li>• Describe what they need to do next.</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss how well the finished product meets their purpose and the design criteria and how well it meets the needs of the user.</li> <li>• Say what they like and do not like about items they have made and attempt to say why.</li> <li>• Talk about their design as they develop and identify good and bad points, and possible improvements they could make next time.</li> <li>• Note changes made during the making process as annotation to plans/drawings.</li> </ul>
Food and Nutrition		Mechanisms
<ul style="list-style-type: none"> <li>• Develop a food vocabulary using taste, smell, texture and feel.</li> <li>• Group familiar food products e.g. fruit and vegetables.</li> <li>• Explain where food comes from.</li> <li>• Cut, peel, grate, chop a range of ingredients</li> <li>• Work safely and hygienically.</li> <li>• Understand the need for a variety of foods in a diet.</li> <li>• Measure and weigh food items, non-statutory measures e.g. spoons, cups.</li> </ul>		<ul style="list-style-type: none"> <li>• Roll paper to create tubes.</li> <li>• Cut dowel using hacksaw and bench hook.</li> <li>• Mark out materials to be cut using a template.</li> <li>• Join appropriately for different materials and situations e.g. glue, tape.</li> <li>• Try out different axle fixings and their strengths and weaknesses. Make vehicles with construction kits which contain free running wheels.</li> <li>• Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels.</li> <li>• Attach wheels to a chassis using an axle.</li> <li>• Experiment with levers and sliders to find different ways of making things move in a 2D plane.</li> <li>• Fold, tear and cut paper and card.</li> <li>• Cut along lines, straight and curved.</li> <li>• Use a hole punch.</li> <li>• Insert paper fasteners for card.</li> </ul>

## Notes for teachers

N.b. Teachers should only choose one aspect of the mechanism unit to cover: axels/ wheels or levers/sliders.

## Project ideas

### Mechanisms:

- Moving pictures
- Make a fire engine or vehicle
- Make a windmill

### Food and nutrition

- Teddy bear's picnic
- Seaside snacks
- Fruit and vegetable tasting
- Link to an area/country being studied

## 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'