

Design and Technology

Disciplinary and Substantive Concepts

Year 3

Block A	<p>TEXTILES</p> <p>Stiffening and Strengthening Fabric</p> <p>How can you make a box out of cloth?</p> <p>Know fabric can be stiffened Know stiffened fabric can hold a form Be able to select and apply solutions to stiffen fabric Be able to make a box using stiffened fabric</p>
Block B	<p>FOOD AND NUTRITION</p> <p>Individual Diets</p> <p>What do we mean by a balanced diet?</p> <p>Know what is meant by the term balanced Know why fresh foods are better Be able to make a fruit and yoghurt dessert Be able to make homemade chips Be able to flavour foods to increase their sensory quality</p>
Block C	<p>MECHANISMS</p> <p>Levers and linkages – mechanical advantage</p> <p>How can you do a lot of work with little effort?</p> <p>Know types of levers and linkages Know terminology relating to levers and linkages Know how levers and linkages can change the direction of movement Be able to design and make simplistic lever and linkage products Be able to evaluate the success of outcomes and recommend improvements</p>
Block D	<p>FOOD AND NUTRITION</p> <p>Food as Medicine</p> <p>How does food affect your body and mind?</p> <p>Know food can help body and mind Know how to prepare and cook a range of vegetables Be able to peel and grate a range of vegetables Be able to add flavour and texture to foods</p>
Block E	<p>SYSTEMS</p> <p>How Things Are Powered</p> <p>How are things powered?</p> <p>Know different types of energy Know why designers need to carefully consider energy sources Be able to identify how things are powered Be able to suggest appropriate energy sources for design problems</p>
Block F	<p>STRUCTURES</p> <p>Spanning Gaps</p> <p>What makes a bridge strong?</p> <p>Know bridges are structures that allow people and vehicles to cross over an open space</p>

	Know towers, piers and arches provide strength to a bridge Be able to design and build a beam bridge that can hold the weight of 100 pennies Be able to identify and name parts of a bridge
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