

# Design and Technology

## Disciplinary and Substantive Concepts

### Year 4

Block B	<p><b>MECHANISMS</b></p> <p><b>Hinges</b></p> <p><b>How many ways are there to open a door?</b></p> <p>Know types of hinges and the related terminology          Know common uses for hinges          Be able to make a variety of model hinges          Be able to make and evaluate hinged products using modelling materials</p>
Block E	<p><b>SYSTEMS (ELECTRICAL)</b></p> <p><b>Switches and Circuits Revisited</b></p> <p><b>How useful are switches?</b></p> <p>Know a switch is an interruption in a circuit          Know switches are widely used in a range of products          Be able to incorporate different types of switches into circuits to perform a function</p>
Block A	<p><b>FOOD AND NUTRITION</b></p> <p><b>Ultra-Processed Food</b></p> <p><b>What is really in your food?</b></p> <p>Know processed foods have many added ingredients          Be able to roll and shape bread dough          Be able to make a soup</p>
Block C	<p><b>TEXTILES</b></p> <p><b>Fixings and Fastenings</b></p> <p><b>How do you keep a towel from slipping off a hook?</b></p> <p>Know fastenings have different functions          Know a shank provides a small amount of space between the button and the fabric          Be able to select appropriate fastenings and attach them to fabric          Be able to make a shank for a button</p>
Block F	<p><b>FOOD AND NUTRITION</b></p> <p><b>Benefits of fresh food</b></p> <p><b>Is cheap food always worse for you?</b></p> <p>Know that cheap processed food often contains additives, salt and sugar, which makes it less healthy than unprocessed food          Be able to peel, grate and chop vegetables to make economical, tasty and healthy food</p>
Block D	<p><b>STRUCTURES</b></p> <p><b>Designing structures using a frame to make them stronger and sturdier</b></p> <p><b>Which shapes will give a structure stability?</b></p> <p>Know triangles provide stability in a structure          Know structural engineers work with architects to ensure structures withstand forces          Be able to make triangles to form and join trusses          Be able to identify the forces that affect structures</p>

