

# Design and Technology

## Disciplinary and Substantive Concepts

### Year 5

Block E	<p><b>STRUCTURES</b></p> <p><b>Developing Structures that are Fit for Purpose</b></p> <p><b>How are frames strengthened, reinforced and made rigid?</b></p> <p>Know engineers use a range of methods to strengthen and reinforce structures Be able to identify and describe ways that frames are strengthened and reinforced,</p>
Block B	<p><b>SYSTEMS</b></p> <p><b>Using Technology to Design and Control</b></p> <p><b>How can we keep ourselves safe on the road?</b></p> <p>Know technology can be used to program and control a product Be able to combine elements of their design knowledge to fulfil a brief</p>
Block A	<p><b>FOOD AND NUTRITION</b></p> <p><b>Food Choices</b></p> <p><b>Why are our diets so different?</b></p> <p>Know some foods and key ingredients from other cultures Know how other cultures' food can be nutritious Be able to make, roll and cook a flatbread Be able to prepare a range of vegetables Be able to present food to a high standard</p>
Block F	<p><b>MECHANISMS</b></p> <p><b>Gears – transferring rotational force</b></p> <p><b>How can you lift a car?</b></p> <p>Know common types of gears Know common uses of gears Know how gears change the direction of movement Be able to design a product which uses gears to lift loads Be able to evaluate the success of outcomes and recommend improvements</p>
Block D	<p><b>FOOD AND NUTRITION</b></p> <p><b>Cultural Influences on Diet</b></p> <p><b>What can you learn from different cultures' diets?</b></p> <p>Know how food can be used as medicines Know how eating food from different countries can help us be healthy Be able to roll and shape ingredients Be able to slice and ribbon a range of vegetables Be able to stir fry vegetables</p>
Block E	<p><b>TEXTILES</b></p> <p><b>Durability of Fabric</b></p> <p><b>Which fabric is ideal for creating a functional and hardwearing lunch bag?</b></p> <p>Know how to waterproof cotton fabric Know which fabrics are functional and hardwearing Be able to use beeswax to waterproof cotton Be able to choose materials and tools to create a lunchbag</p>

