



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Mechanisms	Exploring sliders and their applications. Developing practical skills. Experimenting with different slider systems. Developing designing and problem-solving skills Evaluating Outcomes.	Understanding how wheels and axles works Exploring the size of wheels and positioning of axles Building and testing a simple vehicle	Exploring levers and their applications Developing practical skills Exploring linkages and their applications Developing design skills Making a linkages and levers product Evaluating outcomes	Exploring types of hinges Developing practical skills Developing practical skills Evaluating outcomes	Exploring pulleys and gears and their applications Developing designing and problem-solving skills Developing and applying practical skills Evaluating outcomes	Exploring pulleys and their applications Experimenting with different pulley systems Developing design and problem solving skills Developing practical skills Evaluating outcomes
Structures	Identification of the problem Exploring materials Explicit teaching of skills relating to the brief. Application of skills Evaluation and adaptation	Explicit teaching of skills Exploring materials Application of skills Evaluation and adaptation	Identifying features of bridges Exploring ways to stabilise a simple structure Introducing a design and make challenge Identifying ways to stabilise a structure Application of skills Evaluation and adaptation	Exploration of the key question Exploration of materials and techniques Conducting investigations relating to the key question Application of knowledge and skills Evaluating and modifying	Identification of the problem Exploring materials Explicit teaching of skills relating to the brief Application of skills Evaluation and adaptation	Identification of the problem Testing materials Explicit teaching of skills relating to the brief Application of skills Evaluation and adaptation
Food and Nutrition	Exploring sensory qualities of food Experimenting with new flavours and textures Explicit teaching and revisiting of culinary skills and techniques Applying skills and techniques Evaluating outcomes Exploring tastes and textures of a range of vegetables Demonstrating knife skills Exploring the nutritional value of food	Exploring nutrition Explicit teaching of culinary skills and techniques Evaluating outcomes Exploring the nutritional value of food Applying culinary skills and techniques	Exploring nutrition Explicit teaching of culinary skills and techniques Evaluating outcomes Exploring the healing and sensory qualities of food Applying knowledge Modifying and improving	Exploring nutrition Exploring bread making and how to make soup Explicit teaching of culinary skills and techniques Modifying and improving Evaluating outcomes	Exploring nutrition Explicit teaching of culinary skills and techniques Evaluating outcomes Exploring diets from different cultures Applying skills Modifying and improving	Exploring nutrition Exploring other cultures' foods Explicit teaching of culinary skills and techniques Evaluating outcomes Repeating and improving Exploring healing and sensory qualities of food Applying skills Modifying and improving
Understanding materials	Exploring materials Explicit teaching of skills relating to the brief Application of skills Evaluation and adaptation	Exploration and testing of materials Reference to other designers Exploration of materials and properties Application of knowledge and skills to fulfil a brief Evaluation				
Textiles	Identification of the problem Exploring materials Explicit teaching of skills relating to the brief Application of skills Evaluation and adaptation	Exploring materials and techniques Explicit teaching of skills Evaluation and adaptation Application of skills	Identification of the problem Exploring materials Explicit teaching of skills relating to the brief Application of skills Evaluation and adaptation	Identification of the problem Exploring fasteners Explicit teaching of skills Application of skills Evaluation and adaptation	Identification of problem Exploring materials Specific teaching of skills relating to the brief Application of skills Evaluation and adaptation	Identification of the problem Explicit teaching of skills Exploring materials Application of skills Evaluation and adaptation
Systems and electrical systems			Understand what energy is and why we need it Identify types of energy Understand how types of energy influence design choices Explore energy in the context of design choices	Revisit switches and circuits and the associated vocabulary Explore different types of switches and how they are used Create a simple game involving an interruption in a circuit	Understanding and selecting materials Using fixings and fastenings Using knowledge of programming to control a product	Revisit switches and circuits and the associated vocabulary Explore how multiple switches and components can be included in a circuit Incorporate multiple switches and components into a product to meet a design brief

