

Progression of DT

Bredbury Green Primary School



	Food and Nutrition	Systems and Structures	Critique and Evaluate
Year 1	Food Hygiene and Preparation Know how to handle food safely and hygienically Know the difference between plant and animal food sources and which foods come from where Explain how their knowledge of sources and preparation connects to the dish they prepare <i>(Let's start cooking/food from plants and animals)</i>	Frame Structures: Bridges Know what a structure is Know how to fold, cut and join using a range of techniques Explain how their knowledge of structures supports them in building their own bridges	
Year 2	Where Food Comes From Know how to use the bridge hold and claw grip when preparing food Know which foods are grown, reared and caught Explain how their knowledge of food and nutrition contributes to the structure of a recipe <i>(Cooking without heat/where my food comes from)</i>		Freestanding Structures: Playgrounds Know what a freestanding structure is and how to make them more stable Know how different shapes can affect the integrity of a structure Explain how their knowledge of structures, shapes and construction techniques supports them in designing and building their own freestanding structure
End Points	Food, Nutrition and Preparation - Use basic food preparation techniques (e.g. bridge hold and claw grip) to prepare ingredients safely and hygienically. - Identify whether foods come from plant or animal sources and describe whether they are grown, reared or caught. - Explain how knowledge of food sources, hygiene and preparation informs the choices they make when creating a simple dish or recipe. Structures: Knowledge and Skills - Describe what a structure is and identify examples of different types, including bridges and freestanding structures. - Use a range of basic techniques (e.g. cutting, folding, joining) to construct simple structures. - Explain how different shapes and materials can affect the strength and stability of a structure. Design, Make and Evaluate - Apply knowledge of structures to design and build a simple bridge that meets a clear purpose. - Design and construct a freestanding structure (e.g. playground equipment) that is stable and fit for purpose. - Explain how their understanding of food, structures and construction techniques has influenced their final product and suggest simple improvements.		
Year 3		Shell Structures: Packaging Know what sustainability means and explore sustainable materials Know how shell structures differ from frame and freestanding structures Explain how their investigation of the sustainability of materials has impacted their design and creation of packaging	Pneumatics: Moving Toys Know how to create movement with air using pneumatic mechanisms Know how to develop ideas through annotated sketches Explain how this knowledge supports them in designing, making and evaluating a pneumatic toy
Year 4	Seasonality and Eating Well Know what the Eatwell Guide is and how that can help to influence dietary choices Know how the seasons affect fruit and vegetable production and how this is reflected in available produce Explain how their knowledge of healthy food options and seasonality is linked to their planning and preparation of a seasonal salad <i>(The Eatwell Guide/seasonal food and ingredients)</i>		Levers and Linkages: Interactive Books Know the names and functions of five linkages and identify them in different products Know how to use research and new knowledge to assemble components of an interactive book Explain how their design decisions affected the outcome of the final design and how they would review this next time
End Points	Food, Nutrition and Preparation Use appropriate food preparation techniques safely and hygienically, applying prior knowledge with increasing independence and accuracy. Describe the Eatwell Guide and explain how it supports balanced dietary choices, including consideration of seasonality. Explain how knowledge of healthy eating, food groups and seasonal produce informs the planning and preparation of a balanced dish (e.g. a seasonal salad). Structures: Knowledge and Skills Describe the differences between shell, frame and freestanding structures, including how they are used for different purposes (e.g. packaging).		

	Select and use appropriate materials and techniques to create more complex structures and mechanisms, including cutting, joining and assembling with accuracy. Explain how material choice, shape and construction techniques (including sustainability considerations) affect the strength, function and environmental impact of a product. Design, Make and Evaluate Use annotated sketches and research to develop and communicate design ideas, showing clear links between purpose and outcome. Apply knowledge of mechanisms (e.g. pneumatics, levers and linkages) to design and create a functional product such as a moving toy or interactive book. Evaluate their final product by explaining how design decisions impacted the outcome and suggesting specific, informed improvements for future work		
Year 5	Food Production Know how food is produced and processed, ready for consumption Know how seasonality and location can affect the production and processing of food Explain how the knowledge they have gained supports them to produce a meal they have designed	Pulleys and Gears: Electric Vehicles Know how designers have influenced the development of electric vehicles Know how pulleys and circuits can contribute to a final design Explain how their own final outcome encompasses their knowledge of pulleys, gears and sustainability	
Year 6		Systems and Controls: Sensor Alarms Know how to program a micro:bit to create an alarm system Know how to safely secure electrical components into designs Explain how their knowledge of switches, circuits, programming and electricity is shown through their final design	Products and People: Inspirational Design Know the names of three designers, architects or engineers Know how these people used their creativity and innovation to develop their own ideas Explain how each designer studied impacted their field of expertise and how critique and evaluation supported them with this
End Points	Food, Nutrition and Preparation Independently select and apply a range of food preparation techniques safely and hygienically, demonstrating precision and control. Explain how food is produced, processed and influenced by seasonality, location and sustainability, and how this affects consumer choices. Design, prepare and evaluate a balanced meal, justifying decisions using knowledge of nutrition, the Eatwell Guide and food production systems. Structures: Knowledge and Skills Analyse and compare a range of structures and mechanical systems (e.g. shell, frame, freestanding, pulleys and gears), explaining how their components work together in different contexts. Select and accurately use appropriate materials, tools and components (including electrical elements) to construct functional, high-quality products. Justify design decisions by explaining how materials, mechanisms and construction techniques influence strength, stability, function and sustainability. Design, Make and Evaluate Independently research and develop innovative design ideas, drawing inspiration from significant designers, architects and engineers. Apply knowledge of mechanical and electrical systems (e.g. pulleys, gears, circuits and programming such as micro:bit) to create purposeful, functional products. Critically evaluate their own and others' work, using technical vocabulary to explain the impact of design decisions and propose detailed, reasoned improvements.		