



Wheeler Lane Primary School Curriculum Concepts and Knowledge Journey

STEM Faculty: DT

The building blocks of learning. Our concepts stem from our whole school curriculum intent and thread through our entire school curriculum.

Strand	Year 5	Year 5	Year 6	Year 6	Year 6
Focus	Aspect of DT: Mechanisms Focus: pulleys or gears	Aspect of DT: Structures Focus: frame structures	Aspect of DT: Food Focus: celebrating culture	Aspect of DT: Textiles Focus: combining different fabric shapes	Aspect of DT: Electrical Systems Focus: more complex switches and circuits
Final product	A car	Bird Hide	<i>Flat bread and tzatziki dip-Ancient Greek link</i>	Advent calendar	Burglar alarm
Concept 1 Heritage (Birmingham)	What is Longbridge famous for?	St Phillips Cathedral is the smallest in England. Where is it in Birmingham?	How has Birmingham embraced the Midlands Greek community in Stockland Green?	How did Peter De Bermingham support the fabric industry in Birmingham?	
Concept 2 Communication	Do you think 13 year olds should be allowed to have driving lessons?	Have you been to the Pigeon Park in Birmingham?	Can you taste the difference between vine tomatoes and salad tomatoes?	What is advent?	Did Peter Scott deserve notoriety?
Concept 3 Powerful Stories	Danny the Champion of the world Roald Dahl	The tree lady Katherine Olivia	The Labours of Heracles Mythical Tale	Goodnight Mr Tom Michelle Magorian	Sea Bean Sarah Holding
Concept 4 Sustainability, Rights and Responsibilities	What are the positives and negatives of electric cars?	How have you taken into account the 6 R's of sustainability?	What are the food miles involved to make your product? Could this be reduced?	Can you use biodegradable materials within your product?	What is a product lifecycle?
Concept 5 Powerful people	Wayne Burgess	Amanda Levet: the architect building the future Financial ... www.ft.com > content	Tonia Buxton / Arthur Kay (bio bean)	Jennifer Griffiths (snap tech) Richard Sellmer	Elon Musk/ Lynn Conway
Concept 6 Me - now and in the future	Will cars need drivers in the future?	Will there be any birds in the Rainforest when I am 70?	Will there still be allotments in Birmingham?	Will all fabric be eco friendly when my children are grown up?	Will technology support or hinder the police in their fight against crime?
Subject area 1 Working with tools, equipment, materials and components to make quality products	<ul style="list-style-type: none"> Create a product that includes predictions of where to put weights to make lever balances, a high degree of precision and careful, precise measurements by selecting appropriate tools and techniques (Dowel pegs -to make moving joints, pilot holes) for making their product. 	<ul style="list-style-type: none"> Create a product that includes a high degree of precision, careful, precise measurements and permanent joining techniques. To select appropriate tools (hammers, nails, g clamp, tenon saw, hacksaw, coping saw, shaper saw, hand drill) and techniques for making their product. 	<ul style="list-style-type: none"> To store and prepare food properly using their scientific knowledge of micro-organisms. By using their knowledge of measuring, weighing (time, dry ingredients and liquids) and irreversible changes they will create a new material (eg rubbing in fat and flour if making a yeast based; product) to create a food product. 	<ul style="list-style-type: none"> To create a durable and desirable product that includes pinning, stitching and sewing materials together. 	<ul style="list-style-type: none"> Create an electrical product (not just a circuit) that uses resistance/batteries in series or parallel/variable resistance to dim lights or control speed, to alter the way the electrical product behaves

Subject area 2 Evaluating processes and products	To evaluate their products carrying out appropriate tests.	To evaluate a product against the original design specification	To evaluate it personally and seek evaluation from others	To record their evaluations using drawings with labels	To evaluate against their original criteria and suggest ways that their product could be improved.
Subject area 3					