

Wheelers 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 1	Year 1	Year 1	Year 2	Year 2
Focus	Aspect of DT: Structures Focus: Free-standing structures (not junk modelling)	Aspect of DT: Food Focus: preparing fruit and vegetables	Aspect of DT: Mechanisms Focus: Sliders and Levers	Aspect of DT: Textiles Focus: Templates and joining techniques	Aspect of DT: Mechanisms Focus: Wheels and axles
Final product	Playgrounds for pirate children.	Fruit salad	greeting card	simple bag for Bertie Bear	Push / pull toy,
Concept 1 Heritage (Birmingham)	Have you been to Cannon Hill Park?	Are there any allotments in Birmingham?	Are there places in Birmingham where I can borrow books?	Where in Birmingham was the major cloth trade first established?	Do you know where the transport museum is in Birmingham?
Concept 2 Communication /powerful stories	Explain which was your favourite piece of equipment and why you liked it.	The value of meal times to communicate with other people. For example, the children like talking to each other in the hall when they have their lunch.	Communicate your version of a favourite story with someone. The value of sharing a story together.	Communicate the techniques you used when you made your bag.	Naughty Bus Jan Oke
Concept 3 Powerful People	Louisa Ryland Lady Allen of Hurtwood	Jamie Oliver		Lucienne Day Samuel Parkinson Louis Vuitton	Harry Beck
Concept 4 Sustainability, Rights and Responsibilities	How might you reduce, reuse and recycle in the making of your product?	Bananas and fair trade	Is sending a greeting card environmentally friendly?	Can you use recycled materials within your product?	Is your product made from renewable or non-renewable sources?
Concept 5 Creativity and Enrichment	Visit a playground (school equipment) and explore the equipment.	Make a fruit salad	Create a seasonal card with moving parts.	Create a bag that can fit all the things Bertie Bear will need for essential travel	Visit the transport museum
Concept 6 Me - now and in the future	Will I be able to play in a virtual playground when I am older?	If all the land is taken up with buildings, where will I plant fruit and vegetables?	Will Father Christmas visit homes on the moon?		Will I be able to buy a vehicle that can drive by itself when I am older?
Subject area 1 Working with tools, equipment, materials and components to make quality products	 Create a structure by assembling, joining and combining materials and components together using a variety of methods e.g. glues, masking tape and equipment e.g. scissors. hole punches Explore, investigate and make structures more stable Measure, mark out and cut materials 	 Create a food product by combining foods using basic food handling knowledge and equipment (sharp knives, scales) safely. 	 Create a product by exploring simple see-saws e.g. a ruler balanced on a small box that includes a simple single arm and double arm linkages. Measure, mark out, cut and shape (scoring if Year 2) 	 To use tools (rulers, tapes, scissors) and techniques (glue Sellotape, staples, and knots) to create a product that joins fabrics together in simple ways. Note: (simple stitch for Year 2, including use of binca e.g. for running stitch) 	 To use hand tools safely and appropriately to assemble, join and combine materials in order to make a product that moves using a turning mechanism.

	products	They evaluate their product by asking questions about what they have made and how they have gone about it.	To evaluate against their design criteria.	To evaluate their product as they are developed identifying strengths and possible changes they might make.	Talk about their ideas saying what they like and dislike about them.	To evaluate their product by discussing how well it works in relation to the purpose
5	Subject area 3					