



Wheeler Lane Primary School Curriculum Concepts and Knowledge Journey

STEM Faculty: Science

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

Strand	Year 1 (5 half terms of topics + 1 revisited seasonally**)						Year 2					
Focus	Materials (DT - playgrounds)	All about me (from 'Animals inc humans) (PSHE)	Plants	Animals	Mini-beasts	Seasonal Changes**	Materials (DT)	Being human	Living things and their habitats (inc growing seeds/bulbs to plants and 'Animals, excluding humans') Long topic			
Key Question	What material is the best to slide down?	What am I made out of?	How do I keep a plant alive?	Why are some people vegetarians?	Is it ok to hold a slug? Or even eat it??	When can I have a BBQ?	Which material makes the bounciest ball?	What can a baby elephant do that a human can't?	Is it dead or alive?	What's the ideal habitat for a human?	Do plants have babies?	
Concept 1 Heritage (Birmingham)	Children to learn that Birmingham is/was a city of industry			How have animals helped humans?			Children to learn that Birmingham is/was a city of industry	How does living in a city impact on my health?		Farming in Birmingham		
Concept 2 Communication		BBC bitesize The Five Senses	Does talking to a plant help it grow?		You tube clip of woodlice in natural environment	Weather reports		BBC bitesize What humans need to stay healthy		CBeebies Life on a Farm		Skype chat with zoo keeper
Concept 3 Powerful Stories	Ada Twist Scientist The Three Little Pigs	Once there were Giants	Eric Carle's The Tiny Seed	Eric Carle's stories – Mama bear Mama bear etc	Eric Carle's stories	One Year with Kipper	Charles Macintosh The Story of the Raincoat	The Desert Island Morgan Georgia Banks	Jack and the Beanstalk			
Concept 4 Sustainability, Rights and Responsibilities	Why should I recycle?	How do I affect the world around me?	Why do we need plants and trees?	Is it better for the planet for us to be an omnivore or a carnivore?	What would the world be without minibeasts?	Is Birmingham getting warmer?	Do we have a problem with plastic?	How can I live more sustainably?	What does endangered mean?	Do humans effect the environment when they build houses?	What would happen if plants did not reproduce?	Is palm oil good or bad?
Concept 5 Creativity and Enrichment	Why do things float? Okido	Make sensory boards for nursery	Allotment visit	Animal Man/ Nature Centre		Seasonal Walks Nature Art Allotment visit	Play with plasticine/clay/ play-doh	Desert Island	Allotment visit - growing my own food	Design a bug hotel	Grow lettuce or sunflower	Zoo visit
Concept 6 Me - now and in the future		What are my senses?	Will I grow plants?	What's good about keeping a pet?		What's my favourite season?	Recycling and reusing materials	The activities that make staying healthy fun		Where would I live in the world?	Can I grow my own food?	
Subject area 1 Investigation 1	Best materials for a roundabout	Feely bag Sorting items by senses	Observing flowers		Where do woodlice like to live?		Cars on different material ramps.			Research on food chains	Fruit/seed observations	
Subject area 2 Investigation 2						Geography topic link of 'UK weather'	Wax resist art. Which material is best?					
Subject area 3						**Spread this topic across the year. Seasonally studied						