By Luci Baker, Belgrave St Bartholomew's



Year Five	Number: Place Value, 4 Operations, Fractions, Decimals & Percentages	Geometry: Shape, Position & Direction	Measures: Conversions, Perimeter & Area & Volume	Statistics
Animals inc. Humans -describe the changes as humans develop to old age.	- Measure the length of string to represent the size of a foetus as it develops in the womb. -Weigh out flour to represent the mass of a foetus as it develops in the womb.		-Discuss that babies are usually weighed in pounds and ounces, convert teacher birth weighs from imperial to metric measurements.	-Conduct a growth survey and plot the findings as a line graph (record ag in years and months to make it continuous data).
Living Things and their Habitats -describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird -describe the life process of reproduction in some plants and animals.			- Use tubers, bulbs and rhizomes to grow plants without seeds, revisit these and measure growth across the year.	-Create a bar graph to demonstrate the average gestational period of different animals. Discuss what pattern can be seen in the data. - Use Venn diagrams to identify differences and similarities in the life cycles of living things.
Properties & Changes of Materials -compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets -know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution -use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating -give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic demonstrate that dissolving, mixing and changes of state are reversible changes -explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.	-Discuss negative numbers on a thermometer and the state of matter water would be in if it has a temperature of less than zero.	-Use Venn diagrams to group materials based on their properties.	-Observe and measure evaporation over time by calculating how the area of a hand print on a paper towel/or a puddle changes over time.	-Investigate dissolving, recording the temperature of the water and the time taken to dissolve and display this as a line graph.

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Earth & Space -describe the movement of the Earth, and other planets, relative to the Sun in the solar system -describe the movement of the Moon relative to the Earth -describe the Sun, Earth and Moon as approximately spherical bodies -use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky	-Research the distance Earth is from each planet and/or the sun. -Make a scale model of the universe with the correct distances between each celestial body. - Calculate the proportion of the size of the Earth compared with other celestial bodies.	-Measure how shadows move throughout the day using a rounder's post to enable the angle of movement to be measured.		-Plot how the angle of the shadow changes on a line graph.	
Forces explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object identify the effects of air resistance, water resistance and friction, that act between moving surfaces recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	-Slippy shoe investigation: Investigate friction using a force metre to one decimal place. Phizzi enquiry: slippy shoes The Ogden Trust		-Create parachutes with different areas to investigate air resistance.	- Plot a line graph to show the relationship between the are of the parachute and the time it takes to drop.	