



Science learning Objectives: Year 5

LIVING THINGS AND THEIR HABITAT	
I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.	
I can describe the life process of reproduction in some plants and animals.	
ANIMALS INCLUDING HUMANS	
I can describe the changes as humans develop to old age.	
PROPERTIES AND CHANGES OF MATERIAL	
I can 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	
I know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution	
I can use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	
I can give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic	
I can demonstrate that dissolving, mixing and changes of state are reversible changes	
I can 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.	
EARTH AND SPACE	
I can describe the movement of the Earth, and other planets, relative to the Sun in the solar system	
I can describe the movement of the Moon relative to the Earth	
I can describe the Sun, Earth and Moon as approximately spherical bodies	
I can use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.	
FORCES	
I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object	
I can identify the effects of air resistance, water resistance and friction, that act between moving surfaces	
I can recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	

SCIENTIFIC SKILLS		AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 2	SUMMER 2
OBSERVATION AND CONCLUSION	Begin to relate conclusions to patterns, previous knowledge and observational evidence Make judgements and conclusions about what has been seen, and support these with known facts Justify their own theories through observation and conclusion Use straightforward scientific evidence to answer questions or support findings						
ENQUIRY, PREDICTION AND TESTING	Offer explanations for differences Modify tests for accuracy Plan different types of scientific enquiries to answer questions Recognise and control variables Make practical suggestions about working methods and improvements Use results to draw simple conclusions, make predictions for new values, suggest improvements Develop further observations and experiments from results						
DATA COLLECTION	Gather and classify data in a variety of ways Distinguish and discriminate between different elements of data						
RECORDING	Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions						