



Name		Class of	
Science: Y5			
Statements	13	25	37 including 5 KPIs
Attainment	Year 5 Emerging	Year 5 Developing	Year 5 Secure

Working Scientifically- UKS2

Incert Assessment AT1

To plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.	To take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.	To record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables scatter graphs, bar and line graphs	To use test results to make predictions to set up further comparative and fair tests	To report and present findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other
---	---	---	--	---

Y5 science- 41 statements	
Biology	
Plants	I can identify how plants have adapted in different ways to suit their environment (for water, food, sunlight, warmth, protection).
	I can describe how flowering plants reproduce sexually.
	I can describe how none flowering plants reproduce asexually.
	I can point out and describe the similarities between a human and plant cycle.
Animals including humans	I can identify and describe a life cycle for a mammal, an amphibian, an insect and a bird.
	I can compare the differences between the life cycles of a mammal, an amphibian, an insect and a bird.
	I can describe how animals reproduce.
	I can describe the human life cycle: foetus, baby, infant, toddler, child, teenager, adult, elderly and death.
	I can identify ways in which the human body changes as it ages.
Chemistry	
Materials: Properties & changes	I can use scientific vocabulary to explain why materials are used for specific purposes.
	I can discuss the scientific physical properties of these materials to explain why they are suitable or unsuitable for different purposes.
	I have developed a wide scientific vocabulary for describing the properties of materials: hardness, solubility, transparency, conductivity (electrical and thermal) and magnetic.
	I describe the properties of materials using scientific vocabulary.
	I can understand the main properties of metals: lustrous, malleability, conductivity and high melting point.
	I use these properties to distinguish between metals and non-metals.
	I can describe the difference in properties of a range of materials: hardness, solubility, transparency, conductivity (electrical and thermal) and magnetic.
	I can compare and group materials based on their properties: hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets.
	I can understand reversible and irreversible changes.

	I can describe how materials form into a solution.
	I understand that some materials will dissolve in a liquid and form a solution.
	I can investigate a range of contexts in which changes take place.
	I can describe the difference between melting and dissolving. (Melting – only one material, dissolving – two or more materials)
	Note: Pupils are not required to make quantitative measurements about conductivity and insulation at this stage.
Physics	
Forces & magnets	I can name forces that make things begin to move, get faster or slow down: gravity, air resistance, water resistance & friction.
	I can identify examples where these forces are acting on an object (gravity, air resistance, water resistance & friction).
	I can identify examples of balanced and unbalanced forces.
	I can understand the function of levers, pulleys and gears.
	I can explain how balanced and unbalanced forces may affect the movement of an object.
	I can explore how different forces effect moving objects (gravity, air resistance, water resistance & friction).
	I can explain the effects of these forces
	I can explain how levers, pulleys and gears allow a smaller force to have a greater effect.
Earth & Space	I can name the eight planets that make up our solar system (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus & Neptune – in 2006, Pluto was reclassified as a Dwarf planet).
	I can order and name the Sun and planets in our solar system.
	I can explain some of the key features of planets in our solar system (temperature, size, diameter, orbital period)
	I can investigate the difference between the geocentric model and the heliocentric model of the solar system.
	I understand the difference between a star, planet and celestial body.
	I can explain that the Sun, Earth and Moon are spherical.
	I can use scientific evidence to support the argument that the Sun, Earth & Moon are all spherical.
	I can describe the movement of the Moon relative to the earth (investigate the phases of the moon).
	I can explain how day and night relate to the rotation of the Earth.
	I can explain how the rotation of the Earth affects the length of a year.
	I can investigate night and day in different parts of the Earth (investigate longitude and latitude – day and night at different times and durations).