Winton Primary School **Skills Coverage Tick List**

Areas	Science Skills / Year: / Staff:	Year 5						
To work scientifically	Plan enquiries, including recognising and controlling variables where necessary.							
	Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work.							
	Take measurements, using a range of scientific equipment, with increasing accuracy and precision.							
	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models.							
	Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.							
	Present findings in written form, displays and other presentations.							
	Use test results to make predictions to set up further comparative and fair tests.							
	Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments.							
BIOLOGY								
To investigate living things	Describe the life cycles common to a variety of animals, including humans (birth, growth, development, reproduction, death), and to a variety of plants (growth, reproduction and death).							
	Describe the life process of reproduction in some plants and animals.							
	Describe the changes as humans develop from birth to old age.							
To understand evolution and inheritance	Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.							
	Describe how adaptation leads to evolution.							
	Recognise how and why the human skeleton has changed over time, since we separated from other primates.							
CHEMISTRY								
To investigate materials	Compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, conductivity (electrical and thermal), and response to magnets.							
	Understand how 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, oxidisation and the action of acid on bicarbonate of soda.							
PHYSICS								
To understand movement, forces and magnets	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.							
	Identify the effect of drag forces, such as air resistance, water resistance and friction that act between moving surfaces.							
	Describe, in terms of drag forces, why moving objects that are not driven tend to slow down.							
	Understand that force and motion can be transferred through mechanical devices such as gears, pulleys, levers and springs.							
To understand the Earth's movement in 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.							