Greenfields Academy (Primary) - Long Term Planning – SCIENCE FRAMEWORK

Academic Year Overview 2020/21 – Primary 3

Term	Autumn		Spring		Summer	
	1	2	3	4	5	6
	Scientists and Inventors		Properties of Materials		Living Things and their Habitats	
	Skills to be developed across all topics: • planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • using test results to make predictions to set up further comparative and fair tests • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • identifying scientific evidence that has been used to support or refute ideas or arguments					
Weekly Sequence	**KEY:** **C = Coverage** **N = New Learning** **R = Recall of prior learning** **A = Assessment** **SC – Taught during COVID19 school closure**					
1	Staff Training	C - Scientists and Inventors N – To record and interpret data on the effects of penicillin using a scatter graph.	C – Properties of Materials N – To compare materials according to their properties.	C – Properties of Materials N – To investigate materials that dissolve. N – To list practical using for materials that dissolve.	C – Living Things & their Habitats N - To give reasons for classifying animals based on their similarities and differences.	C – Living Things & their Habitats N – I can explain and describe how some plants reproduce.
2	Staff Training	C - Scientists and Inventors R – To record and interpret data on the effects of penicillin using a scatter graph.	C – Properties of Materials N – To compare, describe and sort materials according to their properties.	C – Properties of Materials N – To use different processes to separate substances.	C – Living Things & their Habitats R - To give reasons for classifying animals based on their similarities and differences. N - To describe how things are classified into groups.	C – Living Things & their Habitats R – I can explain and describe how some plants reproduce.

3	C - Scientists and Inventors N -To report on my findings from an enquiry inspired by Stephen Hawking's theories about black holes	SC - Scientists and Inventors N – To describe the importance of the fossils found by Mary Leakey.	C – Properties of Materials N – To know the difference between thermal insulators and conductors. N – To plan a scientific enquiry.	C – Properties of Materials A – To use different processes to separate substances. R – To record my findings.	C – Living Things & their Habitats R - To describe how things are classified into groups. N - To identify the characteristics of different types of animals.	C – Living Things & their Habitats N - To describe and investigate helpful and harmful microorganisms
4	C - Scientists and Inventors N – To use Libbie Hyman's work to classify invertebrates.	SC - Scientists and Inventors R – To describe the importance of the fossils found by Mary Leakey.	C – Properties of Materials N – To investigate thermal conductors and insulators. R – To record my findings.	C – Properties of Materials N – To describe and observe some chemical changes.	C – Living Things & their Habitats N – To describe the life cycle of different animals.	C – Living Things & their Habitats N - To identify the characteristics of different types of microorganisms.
5	C - Scientists and Inventors R – To use Libbie Hyman's work to classify invertebrates.	C - Scientists and Inventors N - explain how Steve Jobs used electronics to design computers.	C – Properties of Materials N – To investigate electrical conductors and insulators.	C – Properties of Materials N – To identify and explain some irreversible chemical changes.	C – Living Things & their Habitats N – To compare the life cycles of amphibians and insects.	C – Living Things & their Habitats A – To plan, carry out and evaluate a scientific experiment (growing mould on bread).
6	C - Scientists and Inventors N – To identify the evidence scientists used to prove the structure of DNA. N – To research Rosalind Franklin involvement in studying DNA.	C - Scientists and Inventors R - explain how Steve Jobs used electronics to design computers.	C – Properties of Materials N – To investigate electrical conductors and insulators. R – To record my findings.		C – Living Things & their Habitats N – To compare the life cycles of plants, mammals, amphibians, insects, and birds.	Enrichment and Transitions
7	C - Scientists and Inventors R – To identify the evidence scientists used to prove the structure of DNA.	Enrichment				