

**Progression of Science skills -Sc1 (knowledge are covered in accordance with curriculum)**

<b>SC1 Skills – FS</b>	
<b>Skills</b>	<b>Examples (how might this look?)</b>
Asking simple questions	Modelling through play
Making observations	Drawing, talking, looking, describing what we see
Hearing and using basic scientific language	Modelled by adults – seasons, animals etc
<b>SC1 Skills – Year 1</b>	
<b>Skills</b>	<b>Examples (how might this look?)</b>
Asking simple questions	Use of sentence stems e.g. Why does . . . What would happen if . . .
Using their observations and ideas to suggest answers to questions and predicting	Observing beans – suggest why one has/ hasn't grown as well as the others
Observing closely, using simple equipment	Beginning to take basic measurements e.g. rainfall
<b>SC1 Skills – Year 2</b>	
<b>Skills</b>	<b>Examples (how might this look?)</b>
Recognising questions can be answered in different ways	Grouping, classifying – knowing there is more than one way – how can you explain this to a . . . child, adult etc.
Performing simple tests and displaying it in their own way	Listing equipment, proformas giving example structures for 1 star and 3 star next steps
Identifying and classifying	Using varied models to classify materials, plants e.g. – 2 hoop pictures, Venn diagrams, Carroll diagrams
Gathering and recording data to help in answering questions	Concrete, pictorial and abstract ideas. Can you use your results to ask a question?
<b>SC1 Skills – Year 3</b>	
<b>Skills</b>	<b>Examples (how might this look?)</b>
Asking relevant questions and using different types of scientific enquires to answer questions	Pose a question for an investigation e.g. conditions for germination
Setting up simple and practical enquires, comparative and fair tests	Identifying variables. Asking: How is this a fair test? What is unfair? How could this be improved?
Making systematic and careful observations	1 star – closed questions 2 star – what did you notice? How does this compare? 3 star – (as 2 star) with conclusions
Reporting on findings from enquiries including oral and written explanations, displays or presentations of results and conclusions	1 star – define 2 star – compare 3 star - predict
Identifying differences, similarities and changes related to simple scientific ideas and processes	Concrete, pictorial and abstract ideas. Can you explain a process using flow charts, diagrams...?
<b>SC1 Skills – Year 4</b>	
<b>Skills</b>	<b>Examples (how might this look?)</b>
Gathering, recording, classifying and presenting data in a variety of ways to help answer questions	Photos of experiment results, notes of observations, graphs
Taking accurate measurements using standard units a range of equipment including thermometers and data loggers	Measuring distance, length, time, volume, temperature
Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables	Word bank - cloze procedure (1 star)
Using results to draw simple conclusions, make predictions for new values, suggest improvements and	What do you notice? What's changed? What would happen if? Was our test fair? Why/ Why not?

raise further questions	
Using straightforward scientific evidence to answer questions or to support their findings	Write up results. Ask: Why has this happened? What would happen if . . .?
<b>SC1 Skills – Year 5</b>	
<b>Skills</b>	<b>Examples (how might this look?)</b>
Planning different types of scientific enquiries to answer questions including recognising and controlling variables where necessary	1 star- pick correct idea for variable 2 star – write variables 3 star – write 2 experiments with different variables
Taking measurements using a range of scientific equipment	Pick out odd results, why? Is it important? Write equipment lists. Convert measurements. Discuss which provides the best measurement.
Use test results to make predictions to set up further comparative and fair tests	How would you improve? Could you design an improved experiment?
<b>SC1 Skills – Year 6</b>	
<b>Skills</b>	<b>Examples (how might this look?)</b>
Taking measurements using a range of scientific equipment with increasing accuracy and precision, taking repeat readings where appropriate	Measuring the voltage of different bulbs and the amount of current running through a circuit – creating tables and concluding findings
Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	Creating food chains and classification keys to identify species of animals including key scientific terms such as vertebrae.
Reporting and presenting 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 presentations	Children to choose how they wish to present their findings from an experiment. e.g. create a bar graph to show the distance a light source can travel and write a conclusion of what the graph shows. Pose key questions regarding next steps.
Identifying scientific evidence that has been used to support or refute ideas or arguments	Looking at research from the work of scientists such as Jenner and Pasteur, finding out how their discoveries improved people's health. Test the arguments in class and discuss.