

SCIENCE SKILLS (SCIENTIFIC ENQUIRY) ASSESSMENT PROGRESSION STATEMENTS (adapted from Bath Spa University TAPS)

EYFS Early Learning Goals	Understanding the World: Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps. Explore the natural world around them, Making observations and drawing pictures of animals and plants. Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.
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STATEMENT	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Think critically to ask questions and generate an enquiry.	Explore the world around them and ask simple questions.	Recognise that questions can be answered in different ways and make a simple plan.	Raise own, relevant questions and understand that enquiries can be approached in different ways, making decisions about what observations/data to collect and how to do this.	Suggest ways to approach an enquiry and plan how to answer own questions, making decisions about how to record and analyse their findings.	Explore ideas and raise different kinds of questions, selecting the most appropriate type of enquiry to use to answer scientific questions.	Plan different types of scientific enquiries (including comparative and fair tests) to answer their own questions, explaining which variables need to be controlled and why.
Make observations and take measurements and record these appropriately.	Observe closely, using simple equipment.	Perform basic tests and take simple measurements.	Identify which observations/measurements in simple practical enquiries, comparative and fair tests, and use equipment accurately with support where needed.	Collect data from their own observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, deciding how to set up a simple fair test.	Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.	Make own decisions about what observations/measurements to take and how long for, whether to repeat them, and choose the most appropriate equipment with which to do this.
Use appropriate vocabulary and scientific diagrams when recording and reporting on findings.	Talk about what they found out and how they found it out.	Gather and record data to help in answering questions and use appropriate scientific vocabulary to reporting on findings.	Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.	Gather, record, classify and present data in a variety of ways to help in answering questions. Record and report on findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and graphs, using appropriate scientific language.	Decide how to record their data, then use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas and talk about how scientific ideas have developed over time.
Make connections and comparisons , noticing patterns, changes and relationships.	Identify and classify, grouping according to simple features.	Begin to notice patterns and relationships and changes over time.	Talk about criteria for grouping, sorting and classifying and identify differences, similarities or changes related to simple scientific ideas and processes.	Begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them.	Use and develop keys and other records to identify, classify and describe living things and materials, and identify patterns that might be found in the natural environment.	Report and present findings from enquiries, including conclusions and causal relationships Notice different causal relationships in their data and identify evidence which supports or refutes their ideas.

Use scientific evidence to answer questions or support findings.	Ask people questions to gain scientific information.	Use simple secondary sources to find information and answers to questions.	Use straightforward scientific evidence to answer questions or to support their findings.	Recognise when secondary sources may help answer a question that practical investigations cannot.	Recognise which secondary sources will be useful to their research and separate opinion from fact.	Identify and evaluate scientific evidence (their own and others') that has been used to support or refute ideas or arguments.
Think critically to discuss findings and make suggestions.	Use observations and ideas to suggest answers to questions.	Suggest reasons for results and what further tests could be carried out.	Use results to draw simple conclusions, make some predictions for new values and suggest improvements.	Use results to support thinking and make suggestions, raise further questions and make predictions for these.	Use test results to make predictions to set up further comparative and fair tests.	Explain degree of trust in results and identify when further tests/observations might be needed.