Hollinswood Primary School and Nursery

Science Skills Progression Grid

What is Science?

Questions   enquiry   processes   science

Science is a way of improving our knowledge and understanding the world by collecting evidence.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Asking questions and making a prediction (PLAN)	<u>Nursery</u> Ask questions about the familiar world, uch as the place where they live or the natural world. Why things happen and how things work. Understand why questions. "Why did the caterpillar get so fat?" <u>Reception</u> **Ask questions to find out more and to check what has been said to them.** **Articulate ideas and thoughts in well formed sentences** **Use talk to work out problems and organise thinking and activities.** **Explain how things work and why they might happen.** **Use new vocabulary in different contexts**	I am beginning to ask simple questions and recognise that they can be answered in different ways.	I can ask simple questions and recognise that they can be answered in different ways.	I am beginning to ask relevant questions and using different types of scientific enquiries to answer them. Set up simple practical enquiries, comparative and fair tests.	I can ask relevant questions and using different types of scientific enquiries to answer them. Set up simple practical enquiries, comparative and fair tests.	I beginning to plan different types of scientific enquiries to answer questions, including recognising and controlling variables when necessary. Use test results to make predictions to set up further comparative and fair tests.	I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables when necessary. Use test results to make predictions to set up further comparative and fair tests.
Key Vocabula	Question, answer, equipment	Fair test, careful observation. scientific		Research, relevant questions, scientific enquiry, comparative test, systematic, accurate measurement, thermometer, data logger		Plan, variables, accuracy, precision, repeat readings	

Observing and Measuring (Do)	Nursery Know about similarities and differences in relation to places, objects, materials and living things. They make observations of animals and plants Make healthy food choices about food, drinks, activity and toothbrushing Explore collections of materials with similar and/or different properties Talk about what they see, using a wide vocabulary Explore how things work Care for growing plants Explore and talk about the forces that they can feel Talk about the differences between materials and changes they notice **Reception** **Articulate ideas and thoughts in well-formed sentences** **Describe events in some detail** **Use talk to work out problems and organise thinking and activities.** **Explain how things work and why they might happen** **Describe what they see and hear and feel when they are outside**	I'm beginning to observe closely, using simple equipment. Perform simple tests. Identify and classify	I can observe closely, using simple equipment. Perform simple tests. Identify and classify	I'm beginning to make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.	I can make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.	I'm beginning to take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat reading where appropriate,	I can take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat reading where appropriate,
Key Vocabul		Observe, observing, identify, classify, sort, group record, diagram, chart, map, data		systematic, careful observation, accurate measurement, thermometer, data logger		Patterns, systematic, quantitative measurements, identify, classify, describe	

Gathering and Recording (Record)	Nursery Can talk about some of the things they have observed such as plants, animals, natural and found objects. Talk about what they see, using a wide vocabulary Explore how things work Care for growing plants Explore and talk about the forces that they can feel Talk about the differences between materials and changes they notice **Reception** **Articulate ideas and thoughts in well-formed sentences** **Describe events in some detail** **Use talk to work out problems and organise thinking and activities.** **Explain how things work and why they might happen** **Describe what they see and hear and feel when they are outside**	I am beginning to gather and record data to help in answering questions	I can gather and record data to help in answering questions	I am beginning to gather, record, classify and present data **in a variety of ways** to help in answering questions (Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables)	I can gather, record, classify and present data **in a variety of ways** to help in answering questions. (Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables)	I am beginning to record data and results of increasing complexity (scientific diagrams and labels, tables, , bar graphs)	I can cord data and results of increasing complexity (scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs)
Key vocabulary		Compare, contrast, describe		Gather, record, classify, present, drawings, labelled diagrams, keys, bar charts, tables		Scientific diagrams, labels, classification keys, scatter graphs, bar and line graphs	