Key Learning – Working Scientifically / Working Like a Scientist

Using vocabulary	Curiosity and asking questions	
• Use appropriate vocabulary to talk about what they see, hear and feel whilst in the natural world and beyond • Use simple vocabulary to name and describe objects, events, materials, living things and environments.	**Explore / observe** • Look closely at and talk about what they notice whilst exploring the world around them.	**Questioning** • Show an interest in and be curious about the world around them • Whilst playing and exploring, ask questions such as 'I wonder...?' and 'What would happen if...?' and 'How can we...?' •

Finding things out (testing and gathering data)			
Make observations using equipment • Use senses or simple equipment to make observations and develop their small motor skills, (e.g., magnifiers, pipettes, egg timers, simple digital microscopes, etc.) • Collect a series of observations over longer periods of time (e.g., ice changing over a day, a tree changing through the seasons, a plant growing over a few weeks)	**Compare, identify, sort and group** • Make direct comparisons and notice similarities and differences in the natural world, including themselves and others, plants and animals, weather, seasons and materials • Sort / group collections of things using their own criteria • Begin to identify and name objects/living things (and some of their features) by matching them with pictures	**Test** • Test things out to make comparisons and to answer questions during play or exploration • Show resilience, when trying to find things out • Work with others when testing their ideas or the ideas of others • Use talk to help work out problems, organise thinking and activities, and to explain how things work and why they might happen	**Research** • Talk to people (visits/visitors/family) to find things out and answer questions • Think of questions to ask to find out about ... • Use first hand experiences and secondary sources, (e.g. books, photographs, internet) to find things out and answer questions

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Recording (recording evidence)		Answering the question
Describe experiences and events in some detail • Talk about and describe the changes they notice and things that happen, based on real experiences or books read to them.	**Record** • Draw pictures, take photographs, make models or use music, dance and role-play to represent their observations • Record in scrapbooks, as part of a display or using digital media • Add or write simple labels to annotate drawings, photographs, models, images • With support, use sorting rings/boxes, simple prepared tick sheets/tables to record observations and comparisons. • Count objects, actions and sounds • With support, make comparisons using hands and feet and other non-standard measures such as building blocks, pieces of string, small straws	**Explaining and understanding (what has happened / changed)** • Use their observations to help them to answer their questions • Talk about they have done and noticed • Talk about what they have observed and found out e.g., "The big block of ice changed/became to water. It took a long time." "The blue car was the best. It went [down the ramp] the fastest." • Use measurement vocabulary to express simple comparisons between things e.g., "My mummy's feet are bigger than mine", "Sam's plant is taller than mine", "My stone is heavier than Sophie's." • Talk about how their actions changed an outcome e.g. "I pushed the car really hard, and it went a long way." • Make direct comparisons or use their recorded observations to talk about what they found out and answer the question, where appropriate • Use appropriate vocabulary to express their understanding (relevant to EY experiences and context)