

Science Achievement Standard Progression - Foundation to Year 6

Scientific Inquiry Skills					Science Understanding				Science as Human Endeavour	
Questioning and Predicting	Planning and conducting	Processing and analysing data and information	Evaluating	Communicating	Chemical Sciences	Physical Sciences	Earth Sciences	Biological Sciences	Nature and Development of Science	Use and Influence of Science
F	Share and reflect on observations.	Share and reflect on observations.	Share and reflect on observations.	Share and reflect on observations.	Describe the properties and behaviour of familiar objects.	Describe the properties and behaviour of familiar objects.	Suggest how the environment affects them and other living things.	Suggest how the environment affects them and other living things.	Suggest how the environment affects them and other living things.	Suggest how the environment affects them and other living things.
	Ask and respond to questions about familiar objects and events.	Ask and respond to questions about familiar objects and events.	Ask and respond to questions about familiar objects and events.	Ask and respond to questions about familiar objects and events.						
1	Responds to questions	Investigates everyday phenomena with guidance.	Follows instructions to record and sort their observations	Shares their observations with others	Describe objects and events that they encounter in their everyday lives	Describe objects and events that they encounter in their everyday lives	Describe changes in their local environment	Describe how different places meet the needs of living things	Describe changes in their local environment	Describe how different places meet the needs of living things
	Makes predictions	Follows instructions to record their observations		Compares observations						
2	Pose and respond to questions about their experiences	Poses questions about their experiences and predict outcomes of investigations	Use informal measurements to make and compare observations.	Communicate ideas in a variety of ways.	Describe changes to objects, materials and living things	Describe changes to objects, materials and living things	Describe changes to objects, materials and living things	Describe changes to objects, materials and living things	Describe changes to objects, materials and living things	Describe examples of where science is used in people's daily lives
	Predict outcomes of investigations.	Uses informal measurements to make observations	Record and represent observations		Shares their observations with others	Identify that certain materials and resources have different uses	Identify that certain materials and resources have different uses	Identify that certain materials and resources have different uses		
3	Use their experiences to identify questions	Follow procedures to collect and record observations.	Follow procedures to collect and record observations.	Describe how safety and fairness were considered.	Use diagrams and other representations to communicate their ideas	Use their understanding of materials and the behaviour of heat to suggest explanations for everyday observations	Use their understanding of the movement of Earth, to suggest explanations for everyday observations	Group living things based on observable features and distinguish them from non-living things	Describe how they can use science investigations to respond to questions.	Identify when science is used to understand the effect of their actions.
	Make predictions about scientific investigations.		Describes how safety was considered in the investigation							
4	Follow instructions to identify investigable questions about familiar contexts	Describe ways to conduct investigations	Use provided tables and column graphs to organise data and identify patterns.	Suggests reasons why their methods were fair or not	Use formal and informal ways to communicate their observations and findings.	Apply the observable properties of materials to explain how objects and materials can be used	Describe how contact and non-contact forces affect interactions between objects	Discuss how natural processes and human activity cause changes to Earth's surface	Describe relationships that assist the survival of living things	Describe how they can use science investigations to respond to questions.
	Make predictions based on prior knowledge.	Safely uses equipment to make and record observations with accuracy	Suggests explanations for observations and compare their findings with their predictions							
5	Follow instructions to pose questions for investigation	Follow instructions to pose questions for investigation and predict the effect of changing variables when planning an investigation	Construct tables and graphs to identify patterns in the data.	Describe ways to improve the fairness of their investigations	Communicate their ideas and findings using multimodal texts.	Classify substances according to their observable properties and behaviours	Explain everyday phenomena associated with the transfer of light	Describe the key features of our solar system	Analyse how the form of living things enables them to function in their environments	Discuss how scientific developments have affected people's lives, help us solve problems and how science knowledge develops from many people's contributions.
	Predict the effect of changing variables when planning an investigation.	They use equipment in ways that are safe and improve the accuracy of their observations.	Compare patterns in their data with predictions when suggesting explanations.							
6	Follow procedures to develop investigable questions	Collect and organise data	Interpret their data	Identify where improvements to their methods or research could improve the data.	Construct multimodal texts to communicate ideas, methods and findings.	Compare and classify different types of observable changes to materials	Analyse requirements for the transfer of electricity	Explain how natural events cause rapid change to Earth's surface	Describe and predict the effect of environmental changes on individual living things	Discuss how scientific developments have affected people's lives, help us solve problems and how science knowledge develops from many people's contributions.
	Design investigations into simple cause-and-effect relationships.	Identify variables to be changed and measured	Describe and analyse relationships in data using appropriate representations							
		Describe potential safety risks when planning methods.	Identify where improvements to their methods or research could improve the data.							