



## Science Skills Grid

	Making observations and asking questions	Research	Designing and evaluating a method	Forming and communicating findings	Explaining results and predicting
<b>Purpose</b>	Ambitious capable learners	Ethical Informed Citizens	Enterprising, creative contributors	Ambitious capable learners	Ethical, informed citizens
<b>What Matters Statement</b>	Being curious and searching for answers is essential to understanding and predicting phenomena.		Matter and the way it behaves defines our universe and shapes our lives. Forces and energy provide a foundation for understanding our universe. The world around us is full of living things which depend on each other.		
<b>Years 1, 2, and 3</b>	Show curiosity and question how things work.		Follow a sequence of instructions.	Describe observations	Describe what you think might happen in an experiment
<b>Years 4 and 5</b>	Recognise patterns from my observations and investigations.	Find the answers to scientific questions	Ask questions and use my experience to suggest simple methods of inquiry	Communicate my findings	Use my knowledge and understanding to predict effects as part of my scientific exploration.
<b>Years 6 and 7</b>	Describe the impacts of science and technology, past and present, in my everyday life.	Research, devise and use suitable methods of inquiry to investigate my scientific questions.	Evaluate methods to suggest improvements. Identify questions that can be investigated scientifically and suggest suitable methods of inquiry.	Suggest conclusions as a result of carrying out my inquiries. Use design communication methods to develop and present ideas, and respond to feedback	Predict outcomes using detailed scientific reasons to support
<b>Years 8 and 9</b>	Describe the impacts of science and technology, past and present, on society.	Select relevant scientific knowledge from a range of evidence sources to evaluate claims presented as scientific facts.	Research, devise and use suitable methods of inquiry to investigate my scientific questions. Evaluate and identify ways of improving the reliability of data, taking anomalies into account.	Use my findings to draw valid conclusions.	Use a range of models to explain and make predictions.
<b>Years 10 and 11</b>	Devise, justify and use systematic methods of inquiry to rigorously investigate my scientific questions and recognise limitations.	Research and evaluate claims presented as scientific facts by considering the validity of the supporting evidence. Evaluate alternative theories, where the evidence available does not conclusively support one outcome, to form a considered opinion.	Devise, justify and use systematic methods of inquiry to rigorously investigate my scientific questions and recognise limitations.	Link experimental findings and theoretical knowledge to draw valid conclusions. Critically evaluate the quality of data and justify improvements.	Apply and make links between a range of models and use them to support or challenge theories. Evaluate the effectiveness of models and refine them to better fit the evidence available.
<b>Years 12 and 13</b>	Devise, justify and use systematic methods of inquiry to rigorously and independently investigate scientific questions and recognise limitations. Consider the wider impacts of topics in the real world.				Derive equations to explain and support theories and processes.