

Science - KS3 Level Descriptors

Level	When thinking scientifically students:	When understanding the applications and implications of science students:	When communicating in science students:	When using investigative approaches students:	When working critically with evidence students:
3	Use simple models to show situations.	Point out areas of our lives that involve science.	Use simple scientific words to explain ideas.	Select the right equipment for a practical.	Suggest ways to improve a practical.
4	Understand how scientists use ideas and evidence to develop or suggest new theories.	Identify uses of different scientific ideas in different jobs.	Use correct scientific language to communicate ideas.	Take measurements or observations during a practical and identify potential risks.	Draw conclusions from data presented in different ways.
5	Explain processes and suggest solutions to problems by using Scientific models.	Indicate how scientific or technological developments may affect groups of people.	Explain why people working together can lead to improved collection of evidence.	Repeat sets of observations or measurements selecting suitable ranges.	Use results to see how good a method was and suggest improvements.
6	Describe how scientists share their ideas about evidence.	Explain how scientific developments have led scientists to ask and answer new questions.	Decide whether it is better to show information in a qualitative or quantitative way.	Plan practicals and identify variables which are dependant and independent.	Suggest scientific reasons for anomalies or why data has certain limitations.
7	Explain how processes are accepted or rejected in science.	Point out economic, ethical and social arguments for and against science.	Explain how information can be altered or presented in a way that makes it biased.	Identify key variables in practicals, saying which ones cannot be controlled and the effect of this.	Identify relationships between variables and can use this to draw conclusions and make predictions.
8	Analyse the development of scientific theories through new accepted ideas and evidence.	Describe ways that the values of society influence the very nature of science.	Evaluate evidence from different sources to create well structured explanations.	Justify choice of strategy to investigate different Scientific questions.	Propose carefully considered Scientific explanations for unexpected observations.