

KS3 Science depth of understanding grade descriptors

	2	4	6	8
Knowledge, understanding and terminology	Demonstrate some relevant scientific knowledge and understanding using limited scientific terminology. Correct answers more likely to address familiar contexts than unfamiliar contexts	Demonstrate some accurate and appropriate knowledge and understanding and apply these to some familiar and unfamiliar contexts, using some accurate scientific terminology	Demonstrate accurate and relevant knowledge and understanding and apply these mostly correctly to both familiar and unfamiliar contexts using accurate scientific terminology	Demonstrate relevant and comprehensive knowledge and understanding and apply these correctly to both familiar and unfamiliar contexts using accurate scientific terminology
Descriptions and Explanations	Descriptions and explanation require prompts and scaffolding	Develop some logical descriptions, which includes some accurate and relevant detail	Develop accurate, logical and detailed descriptions and straightforward explanations	Develop accurate, logical and detailed descriptions, explanations and arguments
Mathematical skills	Perform some basic calculations when scaffolding is given	Use appropriate mathematical skills to perform calculations	Use a range of mathematical skills to perform multi-step scientific calculations	Use a range of mathematical skills to perform complex, multi-step scientific calculations
Analysis and conclusions	Draw simple conclusions from qualitative or quantitative data	Interpret qualitative and quantitative data and draw conclusions supported by some evidence	Analyse qualitative and quantitative data and draw logical conclusions, supported by evidence	Critically analyse qualitative and quantitative data and draw logical, well-evidenced conclusions
Evaluation	Make basic comments relating to experimental methods	Suggest improvements to experimental methods, and comment on the accuracy of scientific conclusions	Evaluate methodologies to suggest improvements and developments to experimental methods, and comment on the accuracy and validity of scientific conclusions	Critically evaluate and refine methodologies, and judge the validity of scientific conclusions