

Biology Subject Knowledge Audit

Throughout this course, you must demonstrate continuous improvement in your subject knowledge to meet the required standards. Strong expertise in your subject is essential for effective teaching. You will show your knowledge partly through lesson observations, but also by completing the subject knowledge audit below at each assessment point during your training year. The audit's red-amber-green rating of course content will map your progress. This live document will serve as a professional tool that you can build on throughout the early stages of your teaching career.

RAG Rating Key	
S	Secure knowledge = I have good pedagogical content knowledge and would be able to teach it
D	Developing knowledge = I understand it, I need to study it further to be able to teach it
L	Limited Knowledge = I have little knowledge and have not seen it taught

Subject Knowledge	Pre-Course Knowledge	AP1 Autumn Term	AP2 Spring Term	AP3 Summer Term	Final Assessment Summer Term	Action Plan for Development
Dates		18 November 24 to 2 December 24	3 March 25 to 24 March 25	28 April 25 to 12 May 25		
To be confident in the knowledge of the KS3 National Curriculum including:						
Structure and function of living organisms						
Material cycles and energy						
Interactions and interdependencies						
Genetic and evolution						
Matter and atoms, elements and compounds						
Pure and impure substances						
Chemical reactions and energetics						
Periodic Table						
Materials						
Earth and the atmosphere						

	Pre-Course Knowledge	AP1 Autumn Term	AP2 Spring Term	AP3 Summer Term	Final Assessment Summer Term	Action Plan for Development
Energy						
Motion and forces						
Waves						
Electricity and electromagnetism						
Matter						
Space Physics						
To be confident in the knowledge of the KS4 National Curriculum including:						
Cell Biology						
Organisation						
Infection and response						
Bioenergetics						
Homeostasis and response						
Inheritance, variation and evolution						
Ecology						
To have an understanding of the required practicals for Biology						
Non-Specialist KS4 Knowledge						
Health and Safety						
Carry out risk assessment of lab activities						
Use of CLEAPSS to risk assess experiments						
Safely manage the classroom during science experiments						
Knowledge of procedures to deal with accidents and injuries that can occur in a science classroom						
Handling and safe use of equipment						
Practical Skills						
Planning and ordering practical equipment for experiments						

	Pre-Course Knowledge	AP1 Autumn Term	AP2 Spring Term	AP3 Summer Term	Final Assessment Summer Term	Action Plan for Development
Setting up a classroom for safe class experiments or demonstration						
Be confident in delivering demonstrations						
To have an understanding of the terms, accuracy, precision, repeatability, reproducibility and error						
Experience using specialist science equipment for example data harvest, oscilloscope, quick fit glassware, potometers						
To ensure students understand the purpose of the experiment so that all practical work is meaningful						
To understand and teach students how to control variables to ensure a robust scientific method						
To ensure that all students are actively engaged in practical work						
Maths Skills						
To understand the use of prefixes (e.g. micro, nano, kilo) and units (e.g. cm, W, g)						
To understand the use of standard form and significant figures						
To be confident in the use of 3 part equations						
To be confident in drawing graph with a range of axes and be able to calculate gradients and tangents from line of best fit						
Science Literacy						
To understand the use of command different words in science exams. E.g. compare, describe, explain						