

Assessment in Science

What does assessment look like in Science lessons?

- Use of mini whiteboards
- Practice exam questions
- Low stakes knowledge quizzes
- Cold calling
- Educake quizzes
- Microsoft forms quizzes
- Key word spelling tests

Formative Assessment

These are assessments that are completed for topics studied. They focus on the application of skills and knowledge and can include interpreting data, graph drawing, comparisons and calculating results.

At KS4 many of the formative assessments are based on the Required Practicals that form part of the AQA Combined and Triple Science GCSE courses.

All end of unit tests have spacing of at least three weeks and all pupils are encouraged to use revision techniques and resources from Year 7 onwards to ensure techniques are embedded, resulting in them taking greater responsibility for their own learning.

KS3 Summative Assessment

The summative assessments provided include end of unit, end of two units and end of year tests. Tests have been produced for most units and pupils may be assessed on skills and knowledge on one topic, a combination of topics (usually two or three units of work) or at the end of the year (if school exams fall prior to this time then on the carousel we have identified topics that will not be examined at this time).

Each test contains a mixture of different question styles including multiple-choice questions, short answer questions, calculations, drawing and analysing graphs and extended open response questions.

End of Year exams are taken by pupils in Years 7, 8, 9 and 10 and are taken in the window specified by the whole school assessment calendar.

KS4 Summative Assessment

The summative assessments at KS4 include end of unit tests, end of Year 10 exams and Year 11 mock exams. Each test contains a mixture of different question styles including multiple-choice questions,

short answer questions, calculations, interpreting data, drawing and analysing graphs and extended open response questions.

Summative Assessment Programme

KS3

Year	Topic	No of units being assessed	When
7	Cells and Particles	2	End of both topics – mid Autumn Term
	Forces and Diffusion & Separation Techniques	2	End of both topics – late Autumn term
	Reproduction and Acids and Alkalis	2	End of both topics – mid Spring term
	Space, Cells and Particles	3	End of Space topic – late Spring term
	Cells and Particles, Forces and Diffusion & Separation Techniques, Reproduction and Acids and Alkalis, Space	7	End of Year exam – early Summer term
8	Nutrition & Digestion and Periodic Table, Atoms & Elements	2	End of both topics – mid Autumn term
	Light and Sound	2	End of both topics – late Autumn term
	Chemical Reactions 1 and Heat and Insulation	2	End of both topics – mid Spring term
	Health, Nutrition & Digestion and Periodic Table, Atoms & Elements	3	End of Health topic – late Spring term
	Nutrition & Digestion and Periodic Table, Atoms & Elements, Light and Sound, Chemical Reactions 1 and Heat and Insulation, Health	7	End of Year exam – early Summer term
9	Photosynthesis, Forces, Energy transfer, Electricity & Static, Chemical Reactions 2	3	End of the three topics – late Autumn term
	Motion, Genetics	2	End of both topics – early Spring term
	All KS3 topics – including those from Summer term of Year 7 and 8	23	End of KS 3 whole school assessment - Spring Term

Summative Assessment Programme

KS4

Science	Topic	When	
Biology	Cell Structure and Microscopy	Autumn Year 10	
	Cell Transport	Autumn Year 10	
	Cell Division	Autumn Year 10	
	Enzymes and Digestion	Spring Year 10	
	Metabolism and Non-Communicable Disease	Spring Year 10	
	Infection and Response	Spring Year 10	
	Photosynthesis	Summer Year 10	
	Plants	Summer Year 10	
	Respiration and Gas Exchange	Summer Year 10	
	Organisms and then Environment	Summer Year 10/ Autumn Year 11	
	Human Impact on Environment	Autumn Year 11	
	Ecology	Autumn Year 11	
	Homeostasis and Hormones	Autumn Year 11	
	Nervous System	Spring Year 11	
	Inheritance and Genetics	Spring Year 11	
	DNA and Reproduction	Spring Year 11	
	Chemistry	Atomic Structure	Autumn Year 10
		Bonding	Spring Year 10
		Quantitative Chemistry	Spring Year 10
Chemical Changes		Summer Year 10	
Energy Changes		Autumn Year 11	
Rates of Reaction		Autumn Year 11	
Crude Oil		Spring Year 11	
Chemical Analysis		Spring Year 11	
Earth's Atmosphere		Spring Year 11	
Earth's Resources		Spring Year 11	
Physics	Energy 1	Autumn Year 10	
	Energy 2	Autumn Year 10	
	Electricity 1	Spring Year 10	
	Electricity 2	Spring Year 10	
	Particles & Matter	Summer Year 10	
	Radioactivity	Summer Year 10	
	Forces 1	Autumn Year 11	
	Forces 2	Autumn Year 11	
	Waves	Spring Year 11	
	Magnets	Spring Year 11	

