Content	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
Expected progress	Y7:B Y8:B Y9:B	Y7: LPA Y8:B Y9:B	Y7:MPA Y8:B Y9:B	Y7:HPA Y8:LPA Y9:B	Y8:MPA Y9:B	Y8: MPA Y9:LPA	Y8:HPA Y9:MPA	Y8:HPA Y9:MPA	Y8:HPA Y9:HPA	Y8:HPA Y9:HPA
Biology Y7 Y8 Y9	 Preparation Preparation Preparation	 Develop Develop Preparation	 Secure Develop Preparation	 Extend Develop Develop	 Secure Develop	 Secure Developing	 Extend Secure	 Secure	 Extend	 Extend
Chemistry Y7 Y8 Y9	 Preparation Preparation Preparation	 Develop Develop Preparation	 Secure Develop Preparation	 Extend Develop Develop	 Secure Develop	 Secure Secure	 Extend Secure	 Secure	 Extend	 Extend
Physics Y7 Y8 Y9	 Preparation Preparation Preparation	 Develop Develop Preparation	 Secure Develop Preparation	 Extend Develop Develop	 Secure Develop	 Secure Secure	 Extend Secure	 Secure	 Extend	 Extend
Y7	Preparation: **I can:** recognise observations, features or parts of fundamental scientific objects and ideas. • with guidance, suggest practical ways to	Develop: **I can:** recognise and name observations, features or parts of fundamental scientific objects and ideas. • be prompted to suggest practical ways to answer questions.	Secure **I can:** recognise, name and describe observations and features or parts of fundamental scientific objects and ideas. • be prompted to suggest practical	Extend **I can:** • identify science in everyday contexts, comment on relevance. • respond to and make suggestions, with help, about questions. • find information						

	answer questions. • communicate findings in ways such as talking about work in everyday terms	• communicate findings in ways such as talking about work in everyday terms.	ways to answer questions. • communicate findings in ways such as talking about work in everyday terms, or through drawings or pictograms	by using texts, with help. • follow direct instructions in order to stay safe						
Y8	Preparation **I can:** • use knowledge related to the science to identify objects. • with support, make some observations about features of objects, living things and events.	Develop **I can:** • use knowledge related to organisms, environment, materials forces, space to identify/describe some changes and properties. • make some observations about features of objects, living things and events.	Develop **I can:** • use knowledge related to organisms, environment, materials, energy, forces, space; to identify and describe scientific phenomena, observations, properties or ideas. • make observations about	Develop **I can:** • use knowledge of organisms, environment, materials, energy, forces, space to recognise & compare properties, factors & relationships; suggesting answers to questions. • make observations and measurement	Secure **I can:** • use knowledge and understanding of organisms, environment, materials, energy, forces, space to link cause and effect in observations of the properties and differentiate within systems.	Secure **I can:** • explain processes using a model. • apply and use knowledge and understanding in familiar contexts. • describe basic applications and implications of science. • select and use methods that are adequate/appr	Extending **I can:** • explain process stages and phenomena using models. • apply and use knowledge and understanding in familiar contexts. • describe applications and implications of science. • communicate using scientific			

			features of objects, living things & events	s to compare things. • use equipment provided & record findings using correct vocabulary	• make generalisations e.g. sounds get fainter the further they go. • begin to recognise risks with help. • make and record relevant observations & measure quantities, select & use a range of simple equipment, tables and graphs	opriate for the task • make observations & measurements varying one factor only. • record observations, comparisons and measurements using tables and bar charts and begin to plot points to form simple graphs. • communicate conclusions using appropriate scientific language.	and mathematical conventions and terminology. • select and use methods to obtain data systematically			
Y9	Preparation **I can:** • use evidence provided to answer a question and make links between science and	Preparation **I can:** • recognise evidence that has been used to answer a question, make links between science and	Preparation **I can:** • recognise & use evidence generated from answering a question & make links	Develop **I can:** • suggest answers to questions based on my ideas & evidence. • recognise & describe	Develop **I can:** • use simple scientific ideas with evidence collected to give explanations of observations,	Secure **I can:** • recognise that evidence can support or refute scientific ideas. • recognise some applications	Secure **I can:** • recognise that evidence and creative thinking contribute to the development	Secure **I can:** • describe some evidence for some accepted scientific ideas.	Extend **I can:** • explain how evidence supports some accepted scientific ideas.	Extend **I can:** • interpret, evaluate and synthesise data from a range of sources and in a range of contexts.

	everyday objects and experiences. • with guidance, identify a different way to do things	everyday objects. • say whether what happened was expected. • with support & prompting, suggest a different way to do things	between the science & everyday experiences. • say whether what happened was expected. • with support & prompting, suggest different ways to do things	similarities & differences, creating groups • say whether what happened was expected and, when prompted, suggest different ways to do things.	linking cause and effect. • begin to recognise risks with help. • give explanations for observations and for patterns in measurements made and recorded. • communicate results in a scientific way and suggest possible reasons for them as well as improvements.	and implications of science. • interpret data containing positive and negative numbers. • begin to relate conclusions to patterns in data, including graphs, and to scientific knowledge and understanding. • suggest improvements in work, giving reasons.	of scientific ideas. • use line graphs to present data, interpret numerical data and draw conclusions from them. • analyse data drawing conclusions consistent with the evidence. • evaluate working methods, making improvement suggestions.	• analyse findings to draw conclusions that are consistent with the evidence and use scientific knowledge and understanding to explain them; accounting for any inconsistencies in evidence. • manipulate numerical data to make valid comparisons and draw valid conclusions • evaluate evidence, making reasoned suggestions about how working methods	• explain, using abstract ideas where appropriate, the importance of some applications and implications of science. • plan appropriate approaches and procedures where variables cannot readily controlled, synthesising researched information. • analyse & explain findings to draw conclusions from evidence. • identify possible limitations in	• show understanding of the relationship between evidence and scientific ideas, & why scientific ideas may need to change. • in consultation adapt practical approaches to control risks. • communicate showing awareness of a range of views. • evaluate evidence critically and suggest improvements.

								could be improved	primary and secondary data	

Each learning objective is differentiated into Developing, Secure, and Extending (DSE) outcomes:

• Developing learning outcomes: learners at this stage are working towards secure knowledge and understanding, but need more support to achieve this.

• Secure learning outcomes: learners at this stage have a secure knowledge and understanding; this is the aspiration for all learners to achieve, prior to moving on to the next topic.

• Extending learning outcomes: learners at this stage are working beyond age-related expectation, and their knowledge and understanding can be stretched and challenged.