

## What are the aims and intentions of this curriculum?

Developing skills and knowledge to give a broad and basic understanding of science concepts, allowing students to plan and carry out practical work independently and analyse their results. A foundation for starting GCSE science courses.

Term	Topics	Knowledge covered	Skills developed	Assessment
<b>Autumn 1</b>	Practical science skills Human body	The human digestive system Effects of enzymes Respiration	Laboratory safety Different variables in investigations Accuracy and reliability Graph skills	Practical skills assessment
<b>Autumn 2</b>	Human body Light and sound	Effects of exercise and lifestyle on the body How light and sound travel Reflection and refraction	Practical skills in measuring accurately Evaluation skills	Christmas written assessment, questions on practical skills, human body, light and sound
<b>Spring 1</b>	Elements, compounds and mixtures	What are elements and compounds. Writing chemical formulae and equations How to identify and separate mixtures	Practical and thinking skills in separation of different mixtures	Assignment work
<b>Spring 2</b>	Forces and motion	What is a force Effects that forces have Resultant forces How forces affect motion	Practical skills in measuring accurately and recording results Mathematical skills in rearranging equations and use of vectors	Written assessment covering the topics from year 8 so far
<b>Summer 1</b>	Metals and their reactions	Metals and non metals Reactions of metals with oxygen, water and acids Displacement reactions of metals Extracting metals from the Earth	Practical planning skills Observation and recording of results	Assignment work
<b>Summer 2</b>	Plants Ecology	Parts of a plant Photosynthesis Plant reproduction Plants in the environment, adaptations and biodiversity	Dissection and scientific drawing Sampling techniques	End of year assessment covering all material from years 7 and 8