



Year 7 Curriculum Overview

- ✓ Each lesson will start with a series of questions linked to both the previous lesson and topics studied previously.
- ✓ Formative assessment of skills linked to practical work will enable students to demonstrate their acquisition of new skills.
- ✓ Students are encouraged to consolidate learning at least once a week and seek tutor help if unsure on any topics.
- ✓ Within each unit, time will be allocated for consolidation and recall before assessment
- ✓ The following questions will be explored within the units

Half Term 1	
Week	Topic: Introduction to science
Week 1	Introduction to science (expectations, standards, health and safety, introduction of key skills and assessing prior knowledge). What equipment do I use in science? How do I work safely in a lab? How do I carry out a scientific investigation?
Week 2	
Week 3	Physics Topic: Particles
Week 4	How do solids, liquid and gases differ?
Week 5	What happens when matter changes state?
Week 6	What are cooling curves?
Week 7	How do you measure and calculate density?
Week 8	What is diffusion?
Week 9	Where does it happen within nature and the body?
Week 10	How do particles create pressure and how can we change it in a system?
Half Term 2	
Date	Biology Topic: Cells and reproduction
Week 8	How do we classify objects as living?
Week 9	What do we find inside cells?
Week 10	What comparisons can we find between different types of cells?
Week 11	How can we use microscopes?
Week 12	What do onion cells look like through a microscope?
Week 13	What cells are important in our body?
Week 14	What are specialised cells? How are organisms organised?
Week 15	What are the reproductive systems? What changes should I expect during puberty? How are babies made?
Week 16	What are the stages of pregnancy and development of the foetus?
Week 17	Revision of topics so far
Week 18	End of term assessments
Half Term 3	
Date	Physics and Chemistry Topic Earth and Space
Week 15	What is the structure of the Earth? What are the phases of the moon?
Week 16	Why do we have seasons on Earth?
Week 17	How are rocks cycled through the rock cycle? How has Earth's atmosphere developed?
Week 18	What is climate change?
Week 19	What is the carbon cycle? What is the difference between mass and weight? What planets are in our solar system?
Week 20	How stars form? Poster competition of the solar system
Week 21	
Week 22	
Week 23	
Week 24	
Half Term 4	
Date	Chemistry Topic: Separating chemicals and acids and alkalis
Week 21	British Science Week - Research topic and projects
Week 22	What is solubility? How can we make things dissolve quicker?
Week 23	How can we separate mixtures using filtration, crystallisation, distillation and chromatography?
Week 24	What are acids and alkalis?
Week 25	How can we demonstrate pH? What happens when acids react with other substances?
Week 26	How can we make a salt?

Week 25	Physics Topic: Energy
Week 26	What are the different stores of energy? How does energy move from one store to another?
Half Term 5	
Date	Physics Topic: Energy
Week 27	How efficient is your house? How can we reduce wasted energy?
Week 28	How is heat transferred? How can we use the principle of heat transfer to increase efficiency? How can we prevent heat loss? What caused the formation of fossil fuels?
Week 29	How do fossil fuels provide us with electricity? How can we generate electricity from other sources?
Week 30	How can we provide electricity to remote locations?
Week 31	Chemistry Topic: Fast and furious What is the periodic table? Has it always been the current way?
Week 32	What is an atom? How are electrons arranged? Why are some groups special? How do elements react? How can we make reactions quicker?
Half Term 6	
Date	Physics Topic :Forces
Week 33	What are forces? How can I measure a force? How are scalar and vector quantities different?
Week 34	How do objects behave when forces act on them? How do elastic materials behave when squashed?
Week 35	Is friction a bad thing? How does streamlining help performance? Could you lift an elephant?
Week 36	How do we calculate speed?
Week 37	How do we represent speed?
Week 38	Revision of topics learnt in year 7
Week 39	End of year assessments