## Armfield Academy – Department Science



Year 8 Curriculum Overview



	ARAM REPORT
	Half Term 1
Date	Curriculum Overview
Date	Topic: Keeping healthy Electricity and magnetism
WC 02/09	Welcome back and consolidation of some year 7 topics incorporating work with Bunsen burners.
WC 09/09	What is the skeleton? How do muscles help us move? What is respiration?
WC 16/09	Do we always need oxygen to respire? How does the body respond to exercise?
WC 23/09	What are microorganisms? How is the body adapted to keep them out? What happens if germs get in?
WC 30/09	Is static electricity always bad? What are electrical components? How can we build an electrical circuit?
WC 07/10	What are potential difference and current? How do series and parallel circuits differ?
WC 14/10	How does the resistance of a wire change with length? Formative assessment of skills linked to practical work.
	Half Term 2
_	Curriculum Overview
Date	Topic: Electricity and magnetism Chemical reactions
WC 04/11	How do magnets behave? Are all magnets permanent?
WC 11/11	Consolidation, assessment, feedback (DIRT) and pupil voice.
WC 18/11	What is the difference between an element and a compound? Are all reactions permanent?
WC 25/11	What happens during chemical reactions? How do we represent reactions?
WC 02/11 WC 02/11	How can we make reactions quicker?
WC 02/11 WC 09/11	How can we make reactions quicker?
WC 05/11 WC 16/11	What is photosynthesis? Formative assessment of skills linked to practical work.
VVC 10/11	Half Term 3
Date	Topic: Forces
WC 06/01	What are forces? How do we measure force?
WC 00/01 WC 13/01	Friction – friend or foe? How can you reduce the effort needed to move a load?
WC 20/01	How fast can you go? Can a design improve performance?
WC 27/01	What happens when we apply a force to a spring? Formative assessment of skills linked to practical work.
WC 03/02	How do weight and mass differ? What is space?
WC 10/02	Are we alone?
WC 17/02	Consolidation, assessment, feedback (DIRT) and pupil voice.
	Half Term 4
Date	Curriculum Overview
WC 24/02	<b>Topic</b> : Earth and atmosphere Ecology, inheritance and variation
WC 24/02	What makes Earth unique? How does our atmosphere support life? Why did fossil fuels form?
WC 02/03	Why is the carbon cycle important? What are the greenhouse gases?
WC 09/03	Are we damaging the Earth? What is acid rain?
WC 16/03	How is the climate changing? Should we be worried? Formative assessment of skills linked to literacy work.
WC 23/03	How do we classify objects? Can we identify organisms using a key?
WC 30/03	What are food chains? Does a problem with one food source have a major impact on others in the chain?
	Half Term 5
Date	Curriculum Overview
	Topic: Ecology, inheritance and variation
WC 20/04	How do species show variation? Where does the variation come from?
WC 27/04	Can an adaptation help an organism to survive? What causes new species to form?
WC 05/05	How can we improve livestock? Should we manipulate genetics?
WC 11/05	Are zoos important? Can life survive in extreme conditions?
WC 18/05	Revision for end of year summative assessment
	Half Term 6
Date	Curriculum Overview
	Topic: Waves (light and sound)
WC 01/06	Consolidation, assessment, feedback (DIRT) and pupil voice.
WC 08/06	What are waves? How do we produce sound?
MC 1E /0C	How does sound travel?
WC 15/06	
WC 15/06 WC 22/06	Can we measure waves? Formative assessment of skills linked to practical work.
	Can we measure waves? Formative assessment of skills linked to practical work. How can we use waves? What is light?
WC 22/06	

Each lesson with 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.