Armfield Academy – Department of Science





Half Term 1	
Date	Curriculum Overview Topic: Particles
WC 02/09	Introduction to science (expectations, standards, health and safety, introduction of key skills and assessing prior knowledge).
WC 09/09	How do solids, liquid and gases differ?
WC 16/09	What happens when matter changes state? What are cooling curves?
WC 23/09	How do you measure and calculate density? Formative assessment of skills linked to practical work.
WC 30/09	What is diffusion? Where does it happen within nature and the body?
WC 07/10	How do particles create pressure? How can we change the pressure in a system?
WC 14/10	What are atoms? How do atoms combine?
Half Term 2	
Date	Curriculum Overview Topic: Cells and reproduction
WC 04/11	Consolidation, assessment, feedback (DIRT) and pupil voice.
WC 11/11	How do we classify objects as living?
WC 18/11	What do we find inside cells? What comparisons can we find between different types of cells?
WC 25/11	How can we use microscopes? What do onion cells look like through a microscope? Formative assessment of skills linked to practical work.
WC 02/11	What cells are important in our body? How are organisms organised?
WC 09/11	What are the reproductive systems? What changes should I expect during puberty?
WC 16/11	How are babies made? What are the stages of pregnancy and development of the foetus?
Half Term 3	
Date	Curriculum Overview
WC 06/01	What are the different stores of energy? How does energy move from one store to another?
WC 13/01	How efficient is your house? How can we reduce wasted energy?
WC 20/01	How is heat transferred? How can we use the principle of heat transfer to increase efficiency?
WC 27/01	How can we prevent heat loss? Formative assessment of skills linked to practical work.
WC 03/02	What caused the formation of fossil fuels? How do fossil fuels provide us with electricity?
WC 10/02	How can we generate electricity from other sources? How can we provide electricity to remote locations?
WC 17/02	Consolidation, assessment, feedback (DIRT) and pupil voice.
Half Term 4	
Date	Curriculum Overview
Date	Topic: Separating chemicals and acids/alkalis
WC 24/02	What is solubility? How can we make things dissolve quicker?
WC 02/03	How can we separate mixtures? Formative assessment of skills linked to practical work.
WC 09/03	What are acids and alkalis? How can we demonstrate pH?
WC 16/03	How is acid rain formed? What is our atmosphere?
WC 23/03	What happens when acids react with other substances?
WC 30/03	
Curriculum Overview	
Date	Topic: East and furious
WC 20/04	What is the periodic table? Has it always been the current way?
WC 27/04	What is an atom? How are electrons arranged?
WC 05/05	Why are some groups special? How do elements react?
WC 11/05	How can we make reactions quicker?
WC 18/05	Revision for end of year summative assessment
Half Term 6	
Date	Curriculum Overview Topic: Forces
WC 01/06	Consolidation, assessment, feedback (DIRT) and pupil voice.
WC 08/06	What are forces? How do we measure force?
WC 15/06	What happens when we apply a force to a spring? Formative assessment of skills linked to practical work.
WC 22/06	Friction – friend or foe? How can you reduce the effort needed to move a load?
WC 29/06	How fast can you go? Can a design improve performance?
WC 06/07	How do weight and mass differ? What is space?
WC 13/07	What is space?

✓ 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.

