Armfield Academy – Department of Science



Year 9 Biology 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
- \checkmark The following questions will be explored within the units

Half Term 1	
Date	Topic: Cell biology
WC 30/08	Introduction to science (expectations, standards, health and safety, introduction of key skills and assessing prior knowledge).
WC 06/09	What types of cells are there?
WC 13/09	What do we find in cells?
WC 20/09	How do we observe cells? Required practical: Microscopy.
WC 27/09	How do we calculate magnification?
WC 04/10	How do you prepare onion cell slides?
WC 11/09	
Half Term 2	
Date	Topic: Cell biology
WC 01/11	Why do cells specialise?
WC 08/11	How do cells divide?
WC 15/11	What is cell differentiation?
WC 22/11	What are stem cells?
WC 29/11	How do we use stem cells?
WC 06/12	How do substances move through cells?
WC 13/12	How do we calculate surface area to volume ratio?
WC 20/12	
Half Term 3	
Date	Topic: Cell biology
WC 03/01	How does water move across membranes?
WC 10/01	Required practical: Osmosis.
WC 17/01	How are substances absorbed against concentration gradients?
WC 24/01	How do bacteria reproduce?
WC 31/01	Required practical: Culturing microorganisms
WC 07/02	
Half Term 4	
Date	Topic: Organisation
WC 21/02	How are organisms structured?
WC 28/02	What are enzymes?
WC 07/03	What factors affect enzymes? Required practical: Enzymes
WC 14/03	How do we digest our food? How do we test for key food groups? Required practical: Food tests
WC 21/03	now do we test for key lood groups: Required practical. Tood tests
WC 28/03	
Half Term 5	
Date	Topic: Organisation
WC 18/04	How does our heart work to move blood around our body?
WC 25/04	What makes up our blood and how does it move around our bodies? What is coronary heart disease?
WC 02/05	What's the difference between communicable and non-communicable disease?
WC 09/05	Does the way I live my life mean I'm more likely to get a disease?
WC 16/05	
WC 23/05	Half Term 6
Date	Topic: Organisation
WC 06/06	What is cancer and how is it caused?
WC 00/00 WC 13/06	How are the structures of plant tissues adapted to their functions?
WC 13/06 WC 20/06	How do water and sugar move through a plant?
WC 20/08 WC 27/06	
WC 27/08 WC 04/07	
WC 04/07 WC 11/07	
WC 11/07 WC 18/07	
VUC 18/07	