

Year: 7

Subject: Biology

Vision

The purpose of KS3 is to embed the building blocks of scientific knowledge and enquiry, and to inspire a sense of wonder and awe at the world around us.

Year 7 introduces the concept of cells, then looks at how specialised cells form systems within living things to carry out a specific function. The final topic looks at the function of a named example of a system, the reproductive system in humans and plants.

As well the assessments detailed below there will be 2 cumulative tests which will include Biology, Chemistry and Physics topics and an end of year exam.

	Foci	Assessment	Knowledge Organiser
Unit 1	Cells Cells are the fundamental unit of living organisms. Know the functions of the cell organelles, differences between animal and plant cells, and structural adaptations of specialized cells. Includes how to observe, interpret, and record cell structure using a light microscope.	Formative assessments throughout the topic including multiple choice questions, extended writing, and practical work End of topic Test	Cells
Unit 2	• Body Systems The hierarchical organisation of multicellular organisms: from cells to tissues to organs to systems to organisms. The structure and functions of the gas exchange system in humans, including adaptations to function. The structure and function of the human skeleton, to include support, protection, movement, and making blood cells Includes observation of different tissues. Making and recording observations and measurements using a range of methods for different investigations; evaluating the reliability of methods and suggesting possible improvements.	Formative assessments throughout the topic including multiple choice questions, extended writing, and practical work End of topic Test	Structure and Function of Body Systems
Unit 3	Reproduction Reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, puberty, fertilisation, and development of a foetus. Reproduction in plants including flower structure, wind and insect pollination, fertilisation, including quantitative investigation of some dispersal mechanisms.	Formative assessments throughout the topic including multiple choice questions, extended writing, and practical work End of topic Test	Reproduction