

Curriculum Map: BIOLOGY

Nothing Short of Remarkable
We are Ambitious • We are Committed • We are Proud



The 4 Big Ideas Underpinning an Understanding of Biology

Year	Structure is Linked to Function in Living Organisms	Natural Materials are Recycled	Organisms are interdependent	Genetics and Evolution are linked
7	Cells and organisation Reproduction	Nutrition and digestion	Ecosystems	Reproduction
8	Gas exchange systems	Photosynthesis Respiration	Ecosystems at JFCS	Genetics and evolution
9	Skeleton and bone composition Cells Cell Transport Digestive enzymes	Digestive enzymes		Cells
10	Non communicable Diseases Communicable diseases The Nervous System (Separate science)	Photosynthesis Trophic levels in an ecosystem* Respiration (Separate science)	Ecology Trophic levels in an ecosystem*	Non communicable diseases
11	Homeostasis and the Hormonal System The Nervous System (Combined science)	Respiration (Combined science)		Inheritance Variation and Evolution

* separate science topics only

	Year 7	Year 8	Year 9	Year 10	Year 11
Term 1	<i>TOPIC/KNOWLEDGE</i> 1. Cells and organisation 2. Reproduction	<i>TOPIC/KNOWLEDGE</i> 1. Photosynthesis 2. Gas exchange systems	<i>TOPIC/KNOWLEDGE</i> 1. Cells	<i>TOPIC/KNOWLEDGE</i> Biology 1. Communicable disease (combined and separate science) 2. Non-communicable disease (combined and separate science) 3. Photosynthesis (separate science)	<i>TOPIC/KNOWLEDGE</i> Biology 1. Respiration (combined science only) 2. Hormonal system (separate science) 3. Inheritance (combined and separate science) 4. Variation and evolution (combined science)
Term 2	<i>TOPIC/KNOWLEDGE</i> -	<i>TOPIC/KNOWLEDGE</i> 1. Respiration 2. Genetics and Evolution	<i>TOPIC/KNOWLEDGE</i> 1. Cell Transport	<i>TOPIC/KNOWLEDGE</i> 1. Photosynthesis (combined science only) 2. Ecology (Separate science only) 3. Respiration (Separate science only)	<i>TOPIC/KNOWLEDGE</i> 1. Homeostasis (combined only) 2. Inheritance (combined only) 3. Variation and evolution (Separate science)
Term 3	<i>TOPIC/KNOWLEDGE</i> 1. Nutrition and Digestion 2. Ecosystems	<i>TOPIC/KNOWLEDGE</i> 1. Ecology Project	<i>TOPIC/KNOWLEDGE</i> 1. Digestive enzymes 2. Bone composition project	<i>TOPIC/KNOWLEDGE</i> 1. Trophic levels (Separate science) 2. Homeostasis (Separate science) 3. Nervous system (Separate science) 4. Ecology (Combined science only)	<i>TOPIC/KNOWLEDGE</i> Paper 1 Biology Topics 1–4: Cell biology; Organisation; Infection and response; and Bioenergetics. Paper 2 Biology Topics 5–7: Homeostasis and response; Inheritance, variation and evolution; and Ecology.
Career Pathways					