

### Curriculum Map: Biology Year 7

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Content</b> Declarative knowledge 'I Know'	Topic: Organisms Know the organisation of the human body, including bones, joints and muscles Know the structure of plant and animal cells, including specific examples Know how substances diffuse		Topic: Ecosystems Define the key terms related to ecosystems, including producer, consumer, habitat, population, community, niche Know how organisms interact within an ecosystem Identify parts of a flower and state their function		Know the changes that occur in girls and boys during adolescence Define the key organs of male and female reproductive systems Know some causes of low fertility in male and female reproductive systems	
<b>Skills</b> Procedural Knowledge 'I know how to'	Know how to follow a method to prepare a slide for observation Know how to set up and use a microscope Know how to make biological drawings Calculate the total magnification of a microscope		Combine food chains to form a food web Predict the impact of a changing ecosystem on the survival of organisms Interpret predator-prey graphs		Identify key events of the menstrual cycle from a diagram Predict the effect of cigarettes, alcohol or drugs on the developing fetus	
<b>Strategies</b> Conditional Knowledge 'I know when to'	Deduce patterns about how cell structure relates to function Interpret findings from microscopy Evaluate models Make deductions about how medical treatments work based on cells, tissues, organs and systems		Deduce the causes of a change in populations based on data Deduce whether a flower is wind-pollinated or insect-pollinated based on its features Use predator-prey graphs to draw conclusions		Deduce how contraception and fertility treatments work Evaluate some different methods of contraception	
Key Questions	Why do we need a skeleton? How do we move? What are we made of?		How do organisms interact within an ecosystem? What happens to organisms if ecosystems change? How do plants reproduce?		How are new humans made? How do new organisms vary? How are organisms adapted to their habitat?	
Assessment topics	End of topic test (after 9 lessons of topic) and this will be re tested at the end of the term.		End of topic test (after 7 lessons of topic) and this will be re tested at the end of the term.		End of topic test (after 5 lessons of topic) and this will be re tested at the end of the term.	
Cross curricular links/Character Education	PE – body and movement Maths – magnification calculations Art – biological drawings Chemistry – particle model and diffusion		Geography – human impact on biodiversity		PHSCE – sex education RE – contraception	