

# Islip Manor High School

## Scheme of Learning Overview



This scheme of learning has been designed to ensure that you make progress, develop, and master key knowledge, skills, and ideas through academically rich content that reflects, values, and celebrates the diverse experiences, identities, and contributions of our school community.

<b>Year group:</b> 11	<b>Term:</b> Autumn 2	<b>Unit duration:</b> 3-4 weeks	<b>Number of lessons:</b> 6 lessons	<b>Unit title:</b> Evolution and Classification	
<b>Unit assessment:</b> End of topic test			<b>Fertile question:</b> Why don't superbugs die when we use antibiotics?		
<b>Key skills/ concepts/ prior knowledge that students should have when starting this unit:</b>			<b>Start RAG</b>	<b>End RAG</b>	<b>Literacy. Key vocabulary/subject terminology that students should cover</b>
<ol style="list-style-type: none"> <li>1. Evolution is the change in inherited characteristics of a population over time.</li> <li>2. Natural selection is the primary mechanism behind evolution.</li> <li>3. Fossils show how organisms have changed over millions of years.</li> <li>4. A species is a group of organisms that can breed to produce fertile offspring.</li> <li>5. Competition for resources drives the survival of specific individuals.</li> </ol>					Natural Selection, Evolution, Mutation, Antibiotic Resistance, Fossil, Extinction, Classification, Kingdom, Binomial, Domain, Archaea, Mutation
<b>Key skills/concepts/knowledge that students should cover</b>			<b>Start RAG</b>	<b>End RAG</b>	
<ol style="list-style-type: none"> <li>1. <b>Theory of Evolution:</b> State that all species evolved from simple life forms over three billion years ago.</li> <li>2. <b>Natural Selection:</b> Explain how mutations lead to variation, survival, and reproduction.</li> <li>3. <b>Selective Breeding:</b> Breeding plants/animals for specific traits (e.g., disease resistance).</li> <li>4. <b>Antibiotic Resistance:</b> Describe how bacteria evolve rapidly to resist drugs (e.g., MRSA).</li> <li>5. <b>Fossil Formation:</b> How fossils form from remains that have not decayed or been mineralised.</li> <li>6. <b>Fossil Record:</b> Explain why the record is incomplete (soft-bodied organisms rarely fossilize).</li> <li>7. <b>Extinction:</b> Identify causes such as new predators, diseases, or environmental changes.</li> <li>8. <b>Linnaean System:</b> Describe classification into Kingdom, Phylum, Class, Order, Family, Genus, Species.</li> <li>9. <b>Binomial System:</b> Use Genus and Species names for global identification (e.g., <i>Panthera Leo</i>).</li> <li>10. <b>Three-Domain System:</b> Describe the system including Archaea, Bacteria, and Eukaryote.</li> </ol>					<b>Suggested materials teachers could/should use:</b>  <b>AQA Combined Science textbook Oxford University Press Kerboodle</b>  <b>Key home learning tasks students should complete:</b>  Kerboodle assessment checkpoints
<b>Stretch. Key skills/concepts/knowledge that students should cover</b>					
Contrast Darwin's theory of natural selection with Lamarck's theory of acquired characteristics.					

