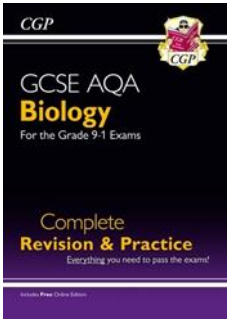



# Transition Map

<b>Subject</b>	GCSE BIOLOGY								
<b>Contact</b>	Nick Mitchell								
<b>Email</b>	<a href="mailto:nmitchell@utcswindon.co.uk">nmitchell@utcswindon.co.uk</a>								
<b>Exam Board</b>	AQA								
<b>Course Outline</b>	<p>2 Year course covering:</p> <ol style="list-style-type: none"> <li><b>1. Cell biology (Get ahead by looking through this unit before September)</b></li> <li>2. Organisation</li> <li>3. Infection and response</li> <li>4. Bioenergetics</li> <li>5. Homeostasis and response</li> <li>6. Inheritance, variation and evolution</li> <li>7. Ecology</li> <li>8. Key ideas</li> </ol>								
<b>Assessment</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #4a4a8a; color: white;"> <th style="width: 50%; padding: 5px;">Paper 1</th> <th style="width: 50%; padding: 5px;">+ Paper 2</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;"> <p><b>What's assessed</b></p> <p>Topics 1–4: Cell biology; Organisation; Infection and response; and Bioenergetics.</p> </td> <td style="padding: 5px;"> <p><b>What's assessed</b></p> <p>Topics 5–7: Homeostasis and response; Inheritance, variation and evolution; and Ecology.</p> </td> </tr> <tr> <td style="padding: 5px;"> <p><b>How it's assessed</b></p> <ul style="list-style-type: none"> <li>Written exam: 1 hour 45 minutes</li> <li>Foundation and Higher Tier</li> <li>100 marks</li> <li>50 % of GCSE</li> </ul> </td> <td style="padding: 5px;"> <p><b>How it's assessed</b></p> <ul style="list-style-type: none"> <li>Written exam: 1 hour 45 minutes</li> <li>Foundation and Higher Tier</li> <li>100 marks</li> <li>50 % of GCSE</li> </ul> </td> </tr> <tr style="background-color: #d9ead3;"> <td style="padding: 5px;"> <p><b>Questions</b></p> <p>Multiple choice, structured, closed short answer and open response.</p> </td> <td style="padding: 5px;"> <p><b>Questions</b></p> <p>Multiple choice, structured, closed short answer and open response.</p> </td> </tr> </tbody> </table>	Paper 1	+ Paper 2	<p><b>What's assessed</b></p> <p>Topics 1–4: Cell biology; Organisation; Infection and response; and Bioenergetics.</p>	<p><b>What's assessed</b></p> <p>Topics 5–7: Homeostasis and response; Inheritance, variation and evolution; and Ecology.</p>	<p><b>How it's assessed</b></p> <ul style="list-style-type: none"> <li>Written exam: 1 hour 45 minutes</li> <li>Foundation and Higher Tier</li> <li>100 marks</li> <li>50 % of GCSE</li> </ul>	<p><b>How it's assessed</b></p> <ul style="list-style-type: none"> <li>Written exam: 1 hour 45 minutes</li> <li>Foundation and Higher Tier</li> <li>100 marks</li> <li>50 % of GCSE</li> </ul>	<p><b>Questions</b></p> <p>Multiple choice, structured, closed short answer and open response.</p>	<p><b>Questions</b></p> <p>Multiple choice, structured, closed short answer and open response.</p>
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<b>Pre-Reading List</b>	<div style="display: flex; align-items: flex-start;">  <div style="margin-left: 10px;"> <p><b>Grade 9-1 GCSE Biology AQA Complete Revision &amp; Practice with Online Edition</b></p> <p>Product code: BAS45</p> <p>ISBN: 9781782945833</p> </div> </div>								

<b>Useful Links</b>	<ul style="list-style-type: none"> <li>• BBC Bitesize: <a href="https://www.bbc.co.uk/bitesize/examspecs/zpgcbk7">https://www.bbc.co.uk/bitesize/examspecs/zpgcbk7</a></li> <li>• Free Science Lessons: Cell Biology (18 Videos): <a href="https://www.youtube.com/playlist?list=PL9IouNCPbCxVU74eQtCcqbaQdYmwzAnIC">https://www.youtube.com/playlist?list=PL9IouNCPbCxVU74eQtCcqbaQdYmwzAnIC</a></li> </ul>
<b>Key Literacy</b>	<p>For Unit B1 you should already know.</p> <ul style="list-style-type: none"> <li>• What cells look like under a light microscope</li> <li>• The similarities and differences between animal and plant cells</li> <li>• The role of diffusion in the movement of materials in and between cells</li> <li>• Reproduction in animals and plants</li> <li>• The importance, mechanism and key features of the digestive system</li> <li>• The basic structure and function of the human gas exchange system</li> <li>• The mechanism of breathing</li> <li>• The role of the leaf stomata in gas exchange in plants</li> <li>• What diffusion is</li> <li>• What osmosis is.</li> <li>• How to calculate volume and area</li> </ul>
<b>Subject Specific Terminology</b>	<ul style="list-style-type: none"> <li>• Nucleus</li> <li>• Cytoplasm</li> <li>• Cell membrane</li> <li>• Mitochondria</li> <li>• Ribosomes</li> <li>• Chloroplasts</li> <li>• Vacuole</li> <li>• Xylem</li> <li>• Phloem</li> <li>• Stomata</li> <li>• Prokaryotic</li> <li>• Eukaryotic</li> <li>• Active Transport</li> </ul>
<b>Activities to complete before Joining</b>	<p>Research these 4 key questions:</p> <ol style="list-style-type: none"> <li>1. What are the differences between Eukaryotic and Prokaryotic cells?</li> <li>2. What are STEM cells and how can they be used in human medicine?</li> <li>3. What is an ENZYME and what factors affect how an enzyme works?</li> <li>4. What is a STENT and how are they used to prevent a heart attack?</li> <li>5. Make sure you can calculate the area and volume of a regular shape</li> <li>6. Learn the following length conversions</li> </ol> <div data-bbox="475 1451 1197 1729" style="background-color: #e0f2f7; padding: 10px; border: 1px solid #ccc;"> <p><b>Using units</b> </p> <p>1 kilometre (km) = 1000 metres (m)</p> <p>1 m = 100 centimetres (cm)</p> <p>1 cm = 10 millimetres (mm)</p> <p>1 mm = 1000 micrometres (µm)</p> <p>1 µm = 1000 nanometres (nm) – so a nanometre is 0.000 000 001 metres (or written in standard form as <math>1 \times 10^{-9}</math> m).</p> </div>