

Criteria	Paper 1	Unit B1
Short key title from which the learning is derived.	TOPIC	Cell Biology
<p>A clear outline of the knowledge which the students will receive across the topic.</p> <p>A clear overview of the explanation that should be delivered in order for pupils to progress.</p> <p><i>The detail for the above needs to be sufficient that teachers and leaders are aware of the key required knowledge to plan individual classes to suit context of students.</i></p>	KNOWLEDGE TAUGHT	<p>Cell Biology</p> <ul style="list-style-type: none"> • Know the differences between Eukaryotic and Prokaryotic cells • Describe the difference between light and electron microscopes • Identify different specialised cells for plants and animals • Describe the different transport systems • Describe the process of the cell cycle and stem cells • Describe the process of Microbial culture. (Triple only)
<p>A clear outline of the skills which will be developed in order to support their knowledge acquisition and application.</p> <p>A clear outline of trips / visits which will underpin and embed their knowledge along with supporting Cultural Capital.</p>	SKILLS DEVELOPED <i>(Include any trips and visits)</i>	<p>Cell Biology</p> <ul style="list-style-type: none"> • Use a light microscope • Calculate magnification • Conduct experiment demonstrating osmosis • Calculate surface area/volume ratio and % change • Investigate the growth of microbes and Aseptic technique (Core Prac Triple only)
<p>A clear explanation of assessments which will provide students with feedback on how to secure progress.</p> <p>Formative; Verbal / Peer / Self feedback should be connected to each lesson to support next step planning.</p> <p>Written feedback should be initiated at least twice per half term.</p> <p>Summative; to support application of topic knowledge. <i>Workbooks will clearly demonstrate the progress of students learning through the topic.</i></p>	ASSESSMENTS <i>(Minimum two per half term, with focussed marking)</i>	<ul style="list-style-type: none"> • Half Term Test • Assessed Tasks for Cells • Verbal feedback given with lessons and Peer/ self-assessment linked to exam content linked to every lesson. • Covered in PPE 1
<p>A clear outline of Home Learning which will be provided weekly.</p> <p><i>Provide 'nugget title' if using Century resources. Student progress needs to be recorded.</i></p>	HOME LEARNING <i>(To be made available via Century Tech; one per week)</i>	<ol style="list-style-type: none"> 1. Cell Biology 2. Microscopy 3. Specialised Cells 4. Transport Systems 5. Revision for Half term Test 6. Aseptic technique (Triple Only)
<p>A clear explanation of prior learning which would have been required in order to build the learning for this topic.</p> <p>A clear explanation of positioning which justifies why this topic is being taught at this stage.</p>	SEQUENCING <i>(What must students already have been taught in order to begin to learn this topic?)</i>	Yr 7 - Cells (Aut 1), Identify the difference between plant and animal cells Name parts of a cell and its function, Explain how the palisade cells are adapted for photosynthesis Yr9 Cells foundation only

<p><i>Identify 'gaps' that need to be addressed and planned in order to support students learning steps.</i></p>	<p><i>Identify opportunities to address knowledge gaps)</i></p>	
<p>A clear explanation of how Fundamental British Values and SMSC are addressed within the topic. An identification of cross-curricular links to ensure correlation between topics and sequencing is considered to secure student learning.</p>	<p><i>SCHEMAS</i> <i>(Where might students learn about elements of this topic in other subjects? Which subjects might this topic feed into beyond your own?)</i></p>	<p>P.E. English Maths SMSC Use of Stem cells and embryo research</p>
<p>Outline career paths which use the knowledge and skills learnt in this topic.</p>	<p><i>CAREERS LINKS</i> <i>(How might this benefit them in the future?)</i></p>	<p>Literacy skills – relevant for all future career and post-16 pathways. Microbiologist Scientific Research</p>