

Question Number	Answer	Additional guidance	Mark
<b>3(b)(i)</b>	<p>An explanation that includes the following points:</p> <ul style="list-style-type: none"> <li>the two {layers (of the membrane) / membranes} are very close together / there is a very small distance between the {two layers / membranes} (1)</li> <li>therefore, the <b>resolution</b> of a light microscope is not high enough (1)</li> </ul>	<p>Accept the bilayer structure is very close together Ignore the bilayer is too {small / thin}</p>	<b>(2)</b>

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<b>3(b)(ii)</b>	<p>A calculation showing the following steps:</p> <ul style="list-style-type: none"> <li>length of XY measured correctly +/- 1mm (1)</li> <li>calculation of actual size (1)</li> <li>correct answer given in <math>\mu\text{m}</math> (1)</li> </ul>	<p>Mark the answer on answer line first <u>Example of calculation</u> 26 mm / 2.6 cm</p> <p><math>26 \div 200 = 0.13 \text{ (mm)}</math></p> <p><math>= 130 \text{ (}\mu\text{m)}</math></p> <p>Correct answer scores full marks</p>	<b>(3)</b>

Question Number	Answer	Additional guidance	Mark
<b>3(b)(iii)</b>	<p>A description that makes reference to the following:</p> <ul style="list-style-type: none"> <li>form spindle {fibres / poles} in {prophase / mitosis / meiosis / cell division} (1)</li> <li>to separate {chromosomes/ chromatids} (1)</li> </ul>	<p>Ignore DNA / genetic material</p>	<b>(2)</b>