

Question Number	Answer	Additional guidance	Mark
2(a)	<p>An answer that includes the following points:</p> <ul style="list-style-type: none"> capsule correctly drawn and labelled (1) (at least) two pili correctly drawn and labelled (1) 	<p>Example of diagram</p>	(2)

Question Number	Answer	Additional guidance	Mark
2(b)	<p>An answer that makes reference to four of the following points:</p> <ul style="list-style-type: none"> increasing sodium chloride concentrations (above 10 g dm^{-3}) decreases the growth rate (of both bacteria) (1) (salt concentration between $0\text{-}6 \text{ g dm}^{-3}$ caused) an initial {increase / constant} rate (1) more rapid decrease in <i>L. piscium</i> growth rate (1) <i>B. thermosphacta</i> had a larger growth rate (than <i>L. piscium</i> at all sodium chloride concentrations) (1) <i>B. thermosphacta</i> was able to continue growing in sodium chloride concentrations above $\{22\text{-}25\} \text{ g dm}^{-3}$ whereas <i>L. piscium</i> had no growth / <i>L. piscium</i> stopped growing at a concentration $\{38\text{-}46\} \text{ g dm}^{-3}$ below the concentration that <i>B. thermosphacta</i> stopped growing (1) data is more scattered about the line of best fit for <i>B. thermosphacta</i> (than <i>L. piscium</i>) 	<p>ACCEPT negative correlation (between sodium chloride concentration and growth rate)</p> <p>ACCEPT converse</p> <p>ACCEPT converse</p> <p>Accept <i>B. thermosphacta</i> is more {tolerant / resistant} (than <i>L. piscium</i>) of higher sodium chloride concentrations Accept <i>B. thermosphacta</i> stopped growing at $\{62\text{-}70\} \text{ g dm}^{-3}$ whereas <i>L. piscium</i> stopped growing at $\{22\text{-}24\} \text{ g dm}^{-3}$</p> <p>ACCEPT converse</p>	(4)