

Question Number	Answer	Additional guidance	Mark
4(a)	<p>An answer that includes two of the following points:</p> <ul style="list-style-type: none"> minerals (1) (suitable) pH (1) (suitable) light (intensity) (1) 	<p>ACCEPT named mineral e.g. phosphate, nitrates ACCEPT oxygen, nitrogen, carbon dioxide, water ignore nutrients / moisture / predation / glucose / temperature</p> <p>ACCEPT suitable wavelength of light / sunlight</p>	(2)

Question Number	Answer	Mark
4(b)(i)	<p>The only correct answer is D William Withering</p> <p><i>A is not correct because Withering tested his digitalis soup</i></p> <p><i>B is not correct because Withering tested his digitalis soup</i></p> <p><i>C is not correct because Withering tested his digitalis soup</i></p>	(1)

Question Number	Answer	Additional guidance	Mark
4(b)(ii)	<p>An explanation that includes the following points:</p> <ul style="list-style-type: none"> patients given a range of {doses / concentrations} / doses increase in concentration (throughout the investigation) (1) (to allow selection of) lowest effective concentration / highest dose that can be tolerated without serious side effects (1) 	ACCEPT (selection of) dose that is effective with minimal side effects	(2)

Question Number	Answer	Additional guidance	Mark
4(b)(iii)	<p>A description that includes the following points:</p> <ul style="list-style-type: none"> (selection of) patients with (colon / kidney) cancer (1) {half / one group} given {curacin A / (this) cancer drug} and {half / one group} given current (best) drug (1) neither doctor nor patient knows which treatment has been given (1) analysis of data to see if curacin A is more effective than the {current best drug / placebo} (1) 	<p>ignore ref to stage of trial</p> <p>ACCEPT placebo / sugar pill</p> <p>ACCEPT analysis to see if there is a {significant difference/improvement} between those who took the drug compared to the placebo</p>	(4)