

# AQA Biology

## GCSE Student book answers

## B6 Practice questions

Question	Answers	Extra information	Mark
01.1	any <b>one</b> from: <ul style="list-style-type: none"> <li>amount / concentration of antibiotic</li> <li>size of discs</li> <li>(incubation) temperature</li> <li>incubated for same time / 3 days</li> <li>type of agar</li> </ul>	do <b>not</b> allow type of antibiotic ignore number of antibiotics  allow type of paper ignore number / position of discs  allow left / kept for same time  ignore references to bacteria or petri dishes	1
01.2	D		1
01.3	C		1
01.4	B  both had a large clear area around the disc  <b>or</b>  killed a lot of both bacteria	no marks if wrong antibiotic  allow a description of this, eg B had the 2 <sup>nd</sup> largest clear area with <i>E.coli</i> and the largest clear area on <i>S.aureus</i>	1  1
01.5	resistant		1
02.1	5 (years)		1
02.2	lab tests on cells / tissues / animals <b>and</b> clinical trials in humans	allow 1 block of lab tests <b>and</b> 3 blocks of clinical trials <b>or</b> number of phases	1
02.3	(healthy volunteers) any <b>one</b> from: <ul style="list-style-type: none"> <li>too great a risk for ill person / patient</li> <li>patient might be taking another drug</li> <li>side effects <u>easier to see</u></li> </ul> (low dose) any <b>one</b> from: <ul style="list-style-type: none"> <li>to reduce any risk</li> <li>to look for side effects</li> </ul>	ignore references to the immune system  allow to avoid harm	1  1

02.4	placebo and drug tested	allow fake drugs / sugar pills	1
	neither patients nor doctors know (who has taken placebo or drug)	this full statement would gain <b>2 marks</b>	1
	(so) avoids bias <b>or</b> (therefore) controls for psychological effects <b>or</b> (so) can tell if drug works rather than placebo effect		1
<b>GCSE Biology only</b>			
03	any <b>six</b> from: <ul style="list-style-type: none"> <li>• mouse is injected with antigen / protein</li> <li>• immune system is stimulated</li> <li>• produces lymphocytes</li> <li>• lymphocyte is combined with a tumour cell</li> <li>• to form a hybridoma cell</li> <li>• hybridoma cell divides</li> <li>• forms a clone of hybridoma cells</li> <li>• cells produce a specific antibody</li> <li>• many cells produce a lot of the antibody</li> <li>• antibody is purified</li> </ul>		6