

Revision Sheet

IGCSE Biology · Unit 17 Inheritance

10 vocabulary items · 29 marks of exam questions (6 questions)

Part 1 · Vocabulary review answer key. Section A wants the exact English spelling.

Question	Answer	Marks
1	allele	1
2	mitosis	1
3	meiosis	1
4	inheritance	1
5	genotype	1
6	dominant	1
7	recessive	1
8	homozygous	1
9	heterozygous	1
10	colour blindness	1

Multiple Choice Answers

Q11: C

Multiple Choice Answers

Q12: D

Q13: D

Q14: D

15(a)(i)	2 / two ;																				
15(a)(ii)	HH ; Hh ;																				
15(a)(iii)	individual 5 would have to inherit the condition if it were recessive, but he does not, so it must be dominant / individuals 5 and 6 would have to show the condition if it were recessive, but they do not and so it must be dominant / AW ;																				
15(b)	<table border="1"><tr><td></td><td>H</td><td>h</td></tr><tr><td>h</td><td>Hh</td><td>hh</td></tr><tr><td>h</td><td>Hh</td><td>hh</td></tr></table> OR <table border="1"><tr><td></td><td>h</td><td>h</td></tr><tr><td>H</td><td>Hh</td><td>Hh</td></tr><tr><td>h</td><td>hh</td><td>hh</td></tr></table> <div>50% ;</div> <div>;;</div>				H	h	h	Hh	hh	h	Hh	hh		h	h	H	Hh	Hh	h	hh	hh
	H	h																			
h	Hh	hh																			
h	Hh	hh																			
	h	h																			
H	Hh	Hh																			
h	hh	hh																			
15(c)(i)	length of DNA ; that codes for a protein / AW ;																				
15(c)(ii)	nucleus ;																				
15(c)(iii)	X and Y ;																				

16(a)(i)	X – nucleus ; Y – mRNA ; Z – ribosome ;
16(a)(ii)	sequence / order, of bases in, mRNA / DNA / gene ;
16(a)(iii)	(the sequence of amino acids) determines the shape of the, protein / receptor ; complementary / specific, shape is required for the receptor molecule to, bind / attach / fit, to neurotransmitter ;
16(b)	not all genes are, expressed / switched on / activated / AW ; cells only produce the (specific) proteins they need / AW ;
16(c)	an alternative form of a gene ;
16(d)	humans choose, specific feature(s) / desired features ; humans choose, individuals / offspring, to reproduce ; selection not influenced by environment / humans manipulate environment ; decreases (genetic) variation / decreases size of gene pool ; faster / shorter ; for economic / aesthetic, reasons ; no / less, evolution ; AVP ;
16(e)	<i>any two from:</i> meiosis ; random mating / cross pollination / crossbreeding ; random fertilisation ; AVP ;;