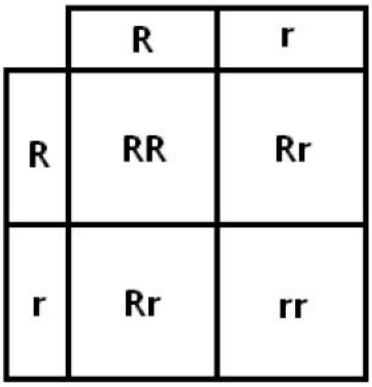
Question Number	Answer	Acceptable answers	Mark
1(a)	Genus; Species;	Must be in the correct order	**(2)**

Question Number	Answer	Acceptable answers	Mark
1(b)	A suggestion including the following points: • rats with the mutation survive to reproduce (1) • pass on the allele which makes the offspring resistant to warfarin (1)	accept breed / produce offspring etc for reproduce accept gene / mutation for allele	**(2)**

Question Number	Answer	Acceptable answers	Mark
1(c)	 Correct gametes (1) Correct offspring (1)	If incorrect gametes are entered into the Punnett square but the offspring for those gametes are correct 1 mark can be awarded as an error carried forward	**(2)**

Question Number		Indicative Content	Mark
QWC	**1(d)**	A explanation to include some of the following points • MRSA is a bacterial infection • number of cases increased from 1995 to 2006 • MRSA is resistant to antibiotics • so MRSA infection not easy to treat • number of cases were similar between 2005 and 2007 • antiseptics killed the bacteria • less bacteria were transferred from person to person • number of cases decreased from 2007 • antiseptics kill bacteria on surfaces • causing less infections from MRSA	**(6)**
Level		No rewardable content	
1	**1 – 2**	• a limited explanation of the graph including correct data reading or the use of antiseptics or antibiotics to kill bacteria/treat MRSA • the answer communicates ideas using simple language and uses limited scientific terminology • spelling, punctuation and grammar are used with limited accuracy	
2	**3 – 4**	• a simple explanation of one trend of the graph including correct data reading and the effect of the use of antiseptics or antibiotics to kill bacteria/treat MRSA • the answer communicates ideas showing some evidence of clarity and organisation and uses scientific terminology appropriately • spelling, punctuation and grammar are used with some accuracy	
3	**5 – 6**	• a detailed explanation of at least two trends of the graph linking it to antibiotic resistance and antiseptic programme • the answer communicates ideas clearly and coherently uses a range of scientific terminology accurately • spelling, punctuation and grammar are used with few errors	

(Total for question 1 = 12 marks)