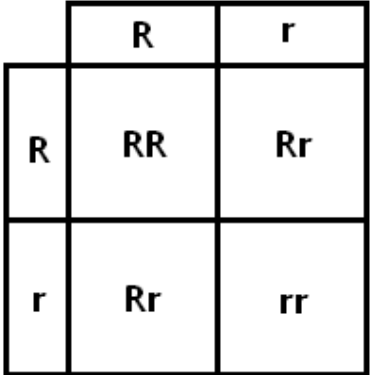


Question Number	Answer	Acceptable answers	Mark
<b>1(a)</b>	Genus;  Species;	Must be in the correct order	<b>(2)</b>

Question Number	Answer	Acceptable answers	Mark
<b>1(b)</b>	A suggestion including the following points: <ul style="list-style-type: none"> <li>rats with the mutation survive to reproduce (1)</li> <li>pass on the allele which makes the offspring resistant to warfarin (1)</li> </ul>	accept breed / produce offspring etc for reproduce  accept gene / mutation for allele	<b>(2)</b>

Question Number	Answer	Acceptable answers	Mark
<b>1(c)</b>	 <p>Correct gametes (1) Correct offspring (1)</p>	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	<b>(2)</b>

Question Number		Indicative Content	Mark
<b>QWC</b>	<b>1 (d)</b>	<p>A explanation to include some of the following points</p> <ul style="list-style-type: none"> <li>• MRSA is a bacterial infection</li> <li>• number of cases increased from 1995 to 2006</li> <li>• MRSA is resistant to antibiotics</li> <li>• so MRSA infection not easy to treat</li> <li>• number of cases were similar between 2005 and 2007</li> <li>• antiseptics killed the bacteria</li> <li>• less bacteria were transferred from person to person</li> <li>• number of cases decreased from 2007</li> <li>• antiseptics kill bacteria on surfaces</li> <li>• causing less infections from MRSA</li> </ul>	<b>(6)</b>
<b>Level</b>		No rewardable content	
<b>1</b>	<b>1 – 2</b>	<ul style="list-style-type: none"> <li>• a limited explanation of the graph including correct data reading or the use of antiseptics or antibiotics to kill bacteria/treat MRSA</li> <li>• the answer communicates ideas using simple language and uses limited scientific terminology</li> <li>• spelling, punctuation and grammar are used with limited accuracy</li> </ul>	
<b>2</b>	<b>3 – 4</b>	<ul style="list-style-type: none"> <li>• 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</li> <li>• the answer communicates ideas showing some evidence of clarity and organisation and uses scientific terminology appropriately</li> <li>• spelling, punctuation and grammar are used with some accuracy</li> </ul>	
<b>3</b>	<b>5 – 6</b>	<ul style="list-style-type: none"> <li>• a detailed explanation of at least two trends of the graph linking it to antibiotic resistance and antiseptic programme</li> <li>• the answer communicates ideas clearly and coherently uses a range of scientific terminology accurately</li> <li>• spelling, punctuation and grammar are used with few errors</li> </ul>	

**(Total for question 1 = 12 marks)**