



*Rewarding Learning*

**General Certificate of Secondary Education  
2010–2011**

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**Science: Single Award (Modular)**

**Staying Alive  
Module 1**

**Foundation Tier**

**[GSC11]**

**WEDNESDAY 23 FEBRUARY 2011, MORNING**

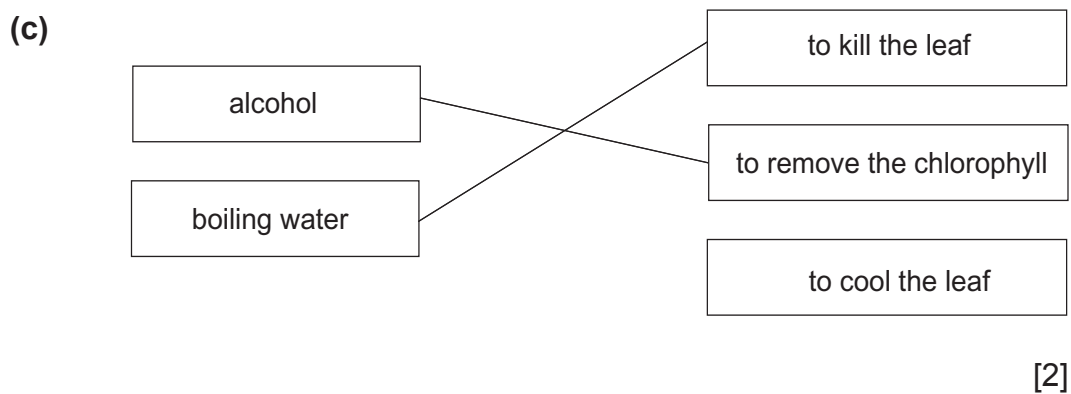
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**MARK  
SCHEME**

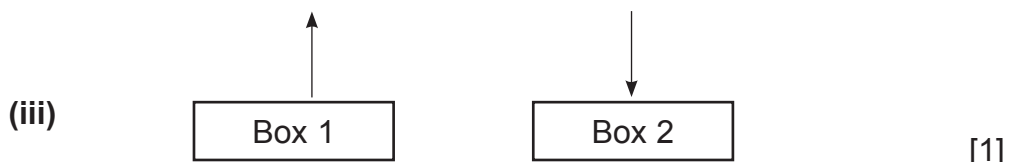
- 1 (a) fat, energy [2]  
 (b) (i) protein [1]  
 (ii) iodine [1]  
 (iii) brown to blue/black [1]  
 (c) (i) (very) underweight, slim, skinny, thin, bony [1]  
 (ii) protein [1]  
 (iii) fat unacceptable to society/low self esteem/control stress [1]

- 2 (a) (i) respiration [1]  
 (ii) need light/energy [1]  
 (iii) water (accept correct formula) [1]

(b) shade area follow leaflets not touching edge (except base) [1]



- 3 (a) (i) scrotum [1]  
 (ii) put/deposit sperm into vagina/release sperm [1]



(iv) testes [1]

- (b) Vagina [4]  
 Placenta  
 Amnion  
 Cervix

AVAILABLE MARKS	
8	
6	
8	

			AVAILABLE MARKS									
4	<p>(a) heading a ball ✓ reading ✓ knee jerk 3 correct [2] 1 or 2 [1]</p> <p>(b) (i) 2</p> <p>(ii) D if part (i) = 4+ then accept A or C</p> <p>(iii) all correct [2], 1 or 2 correct [1]</p> <p>(iv) identifying an anomalous result/2nd (much) bigger/not all same/ one not accurate would have been less accurate/more reliable/average</p>	<p>running ✓ answering a phone ✓ deduct [1] for any more [3]</p>	<p>[2]</p> <p>[1]</p> <p>[1]</p> <p>[2]</p> <p>[2]</p> <p>8</p>									
5	<p>(a) (i) levels rise/insulin (pancreas) produced/glucose to glycogen/ stored in liver/levels fall any <b>three</b></p> <p>(ii) diabetes (Type 1)</p>	<p>Parents F and f [2] F1 if correct [1]</p>	<p>[3]</p> <p>[1]</p> <p>[3]</p> <p>[1]</p> <p>8</p>									
	<p>(b)</p> <table border="1" style="margin-left: 20px;"> <tr><td></td><td>F</td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td>f</td><td></td><td>ff</td></tr> </table>		F					f		ff		
	F											
f		ff										
	<p>(c) Any ethical issue, e.g. religious/unnatural/consequences (designer babies)</p>		<p>[1]</p> <p>8</p>									
6	<p>(a) (i) medication (includes equipment) therapy/medical staff, hospital stays/long term complications any <b>two</b></p> <p>(ii) short term, can be cured/easier to treat, less equipment, less serious, less medication/less staff/less hospital time/one operation</p> <p>(b) loss of job, cost of benefits/emotional cost to families, family takes care of/sick pay, cost to employers.</p>		<p>[2]</p> <p>[3]</p> <p>[2]</p> <p>7</p>									
<b>Total</b>			<b>45</b>									