



Rewarding Learning

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

Science: Single Award (Modular)

Staying Alive
Module 1

Foundation Tier

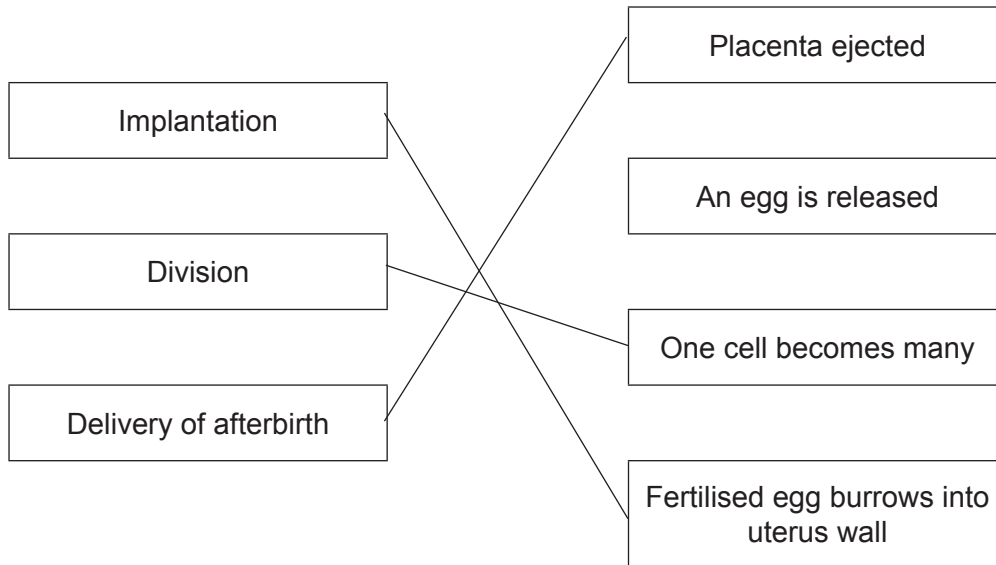
[GSC11]

TUESDAY 9 NOVEMBER 2010, AFTERNOON

**MARK
SCHEME**

			AVAILABLE MARKS	
1	(a) (i) $[\frac{1}{2}]$ each correct bar (round down)	[2]	7	
	(ii) 2000 (working out not needed)	[2]		
	(iii) increase	[1]		
(b)	respiration carbon dioxide	[2]		
2	(a) (i) sugar	[1]	7	
	(ii) starch/carbohydrate	[1]		
	(b) (i) egg	[1]		
	(ii) lemon	[1]		
	(c) 3	[1]		
	(d) (i) exercise more	[1]		
	(ii) family/employer/emotional activity/financial	[1]		
3	(a) A-C-E-D [2] (All correct [2], 1 mistake [-1])	[2]	6	
	A-C/	}		[1]
	C-E/			
	E-D			
	(b) (i) to one oviduct	[1]		
(ii) prevents sperm reaching egg/egg entering oviduct prevents fertilisation	[1] [1]			
(iii) kidney damage/STDs/hypertension/anaemia (AIDS)	[1]			

4 (a)



[3]

(b) P 23, Q 46

[1]

(c) homozygous

[1]

5

5 (a) 1. 60/59/58

[1]

2. Highest rate [1]; any more wasted/cheaper [1]

[2]

(b) 1. Food

2. Oxygen

[2]

5

6 (a) brain/spinal cord; muscle; any correct example of receptor;
sense organ/pain sensor

[3]

(b) brain not control/spinal cord is, faster, shorter pathway

[2]

(c) (i) 3

[1]

(ii) Connor recovers 3 mins Gill 5 mins/shorter recovery time

[1]

(iii) Gill gets shorter and Connor's increases in length
(improves) (gets worse)

[1]

8

AVAILABLE
MARKS

7	(a) (i)	had a meal (energy drink not acceptable)	[1]	AVAILABLE MARKS
	(ii)	insulin; causes <u>liver</u> ; to <u>absorb</u> glucose; <u>stores</u> as <u>glycogen</u> ; increases respiration	[3]	
	(b) (i)	Any two : more processed/junk food; more obesity; less exercise (sugary) (fatty)	[2]	
	(ii)	age of onset/treatment/cause – Type must be stated	[1]	
		Total		7
				45