



Rewarding Learning

**General Certificate of Secondary Education
2012**

Science: Single Award (Modular)

Staying Alive

Module 1

Foundation Tier

[GSC11]

MONDAY 12 NOVEMBER 2012

1.30 pm–2.15 pm

**MARK
SCHEME**

			AVAILABLE MARKS	
1	(a) (i)	$\frac{1}{2}$ mark per correct bar round down	[2]	8
	(i)	70 – 20 50mg	[2]	
	(iii)	cottage/most iron: needed for red blood cells	[2]	
	(b)	Protein/fat: Growth/energy	[2]	
2	(a)	reduce time spent watching television: reduce stress: stop smoking	[3]	7
	(b)	descending curve: finishes above 0	[2]	
	(c)	wholewheat : fibre	[2]	
3	(a) (i)	line to vagina	[1]	6
	(ii)	A E C B AEC or ECB – 1 AE or EC or CB – 1 Ignore position	[2]	
	(b) (i)	vasectomy	[1]	
	(ii)	sperm duct	[1]	
	(c)	religion/moral/stopping life	[1]	
4	(a)	eye : ear : skin : tongue : nose Any two	[2]	7
	(b)	sight : brain : muscle Correct order only	[3]	
	(c)	brain : spinal cord	[2]	
5	(a) (i)	34	[1]	5
	(ii)	humans have 46 paired chromosomes/ should have single/23	[2]	
	(b) (i)	DNA	[1]	
	(ii)	eye colour	[1]	

		AVAILABLE MARKS
6	(a) Children	[1]
	(b) encourage to consume <u>more</u> fat/sugar [1]: named health problems: dental decay/diabetes/heart disease/any valid [2]	[3]
	(c) like them/won't happen to me/any valid	[1]
7	(a) (Part covered: yellow/brown) [1] no light [1] + converse [1] (uncovered part: black/blue) [1] light [1] + converse [1]	[3]
	(b) boiling water – to kill cells/allow stain into cell: boil in ethanol – remove chlorophyll: rinse in hot water – to soften: spread on white tile – to see colour: add drops of iodine – to see if starch present	Any [3]
	(c) produces food/produces oxygen	[1]
Total		45