



Rewarding Learning

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

Science: Single Award (Modular)

**Staying Alive
Module 1**

Foundation Tier

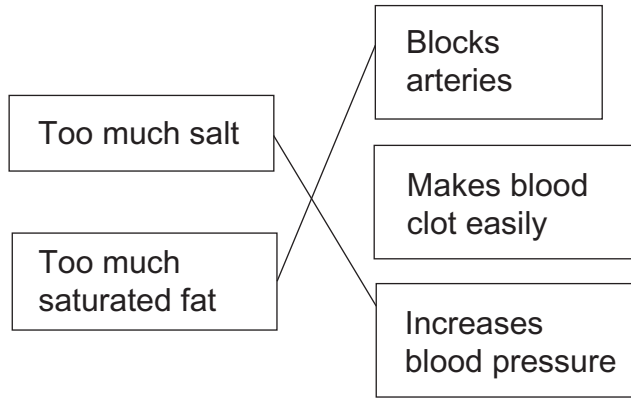
[GSC11]

THURSDAY 19 MAY 2011, MORNING

**MARK
SCHEME**

			AVAILABLE MARKS	
1	(a)	energy, prevents scurvy, red blood cells	[3]	5
	(b) (i)	B	[1]	
	(ii)	prevents constipation/reduce risk of bowel cancer aids digestion	[1]	
2	(a) (i)	line must be in or touch wall	[1]	7
	(ii)	line to ovary	[1]	
	(b)	D B A C B A or A C or D B [1] – any 2 in correct order	[2]	
	(c) (i)	fertilisation	[1]	
	(ii)	oviduct/fallopian tube	[1]	
	(iii)	permanent/change mind/too young	[1]	
3	(a) (i)	all bars correct [2], 3 or 4 correct [1]	[2]	5
	(ii)	2002–2003 3–2	[1]	
	(iii)	decreased/26	[1]	
	(b)	kidney problems	[1]	
4	(a) (i)	helix	[1]	7
	(ii)	gene/allele/nucleotide	[1]	
	(b)	single/half the amount, paired/double amount, they have 23 pairs, normal/body cells 46	[1]	
	(c) (i)	three	[1]	
	(ii)	three	[1]	
	(iii)	blond, black	[2]	
5	(a) (i)	reducing stress/less salt/less fat/less alcohol	[1]	1
	(ii)	cannot due to work/family/financial, do not believe need to any habit, addicted, medical prob. explained	[1]	
	(b)	weight check/bp/urine/cholesterol/bloods test/blood sugar must be regular	[1]	

(c)



[2]

(d) (i) A

[1]

(ii) age/treatment/cause type 2 must refer to
type 1 need not

[1]

7

6 (a) (i) A, most tastebuds

[1]

(ii) 1. same size area/paper, 2. same place/time on tongue
same amount of colouring same pressure

[2]

(b) muscle/heart

[1]

(c) received signals/sent message
from tongue/tastebuds/receptor,
sent signal to eyes/mouth/face/muscles/effector

[3]

7

7 (a) any 2 correct e.g. breathing/snoring, heart beating, digestion,
keep warm, most exercise, growth and repair [1]
brain function/dreaming, most physical, growth [1] repair only [0]

[2]

(b) muscles work harder, need more food/oxygen, to respire,
or
heart, needs to work harder/beats faster/pump blood faster,
to supply muscles any 3

[3]

(c) respiration, all body cells

[2]

7

Total

45