



Rewarding Learning

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

Science: Single Award (Modular)

Human Activity and Health
Module 2

Foundation Tier

[GSC21]

THURSDAY 11 NOVEMBER 2010, AFTERNOON

**MARK
SCHEME**

		AVAILABLE MARKS
1	(a)	
		gonorrhoea
	virus	
		thrush
		[3]
	(b) skin – blood clotting	[2]
		5
2	(a) (i) 157 cm	[1]
	(ii) 1	[1]
	(iii) gradual differences between individuals/no discrete groups/ wide range/gradual change	[1]
	(b) tongue rolling	[1]
	(c) (i) feel good factor/vitamin D/looks attractive/confidence	[1]
	(ii) disadvantage – burns/(skin) cancer/skin damage	[1]
		6
3	(a) (i) better diets; better medical care	[2]
	(ii) pollution/using up resources/food	[1]
	(b) (i) A and C [1] B [1]	[2]
	(ii) quotas/sanctuary/larger meshes/decommissioning/ number of fishing days allowed; appropriate explanation (must have attempted description to get explanation)	[2]
		7
4	(a) (i) 3 legs correct = [2]; 2 legs correct = [1]	[2]
	(ii) north/north-west	[1]
	(iii) wind; sun/light; water/rain/humidity/moisture; temperature Any two	[2]
	(iv) larger area of tree sampled; more trees; more compass points Any two	[2]
	(b) decrease in number/fewer/ not die/ not won't grow/ not none	[1]
		8

			AVAILABLE MARKS
5	(a) contamination in broken flask or converse; because microbes could gain entry; swan neck traps microbes; Any three	[3]	5
	(b) same soup; same time; same temperature; both sterilised Any two	[2]	
6	(a) (i) reduction in number of children vaccinated	[1]	8
	(ii) more catching measles/numbers went up	[1]	
	(iii) vaccine proved to be safe/link with autism not proven	[1]	
	(b) (i) antibiotic not specific/combats range of bacteria; antibiotic faster acting	[2]	
	(ii) development of antibiotic resistance /"superbugs"	[1]	
	(c) (i) bacteria inside white blood cell/phagocyte engulfing	[1]	
	(ii) phagocytosis	[1]	
7	(a) fast growing/short life cycle; never runs out/renewable/regrows	[2]	
	(b) link between climate change and global warming; carbon dioxide both produced and used; equal amounts	[3]	
	(c) subsidy or implied	[1]	
		Total	45