

Assessment Schedule 10B 2009

/ means OR eg. green / blue – answer needs green OR blue
 () means additional, not really required eg. Gauze (mat) – gauze would be sufficient
 : means AND eg. red : hot - answer needs red and hot.

Question	Evidence	Marks
1(a)	Corrosive circled	1 mark
(b)	So scientists are aware of potential dangers/ can use the chemical safely/ it is corrosive and can burn you (other named dangers accepted)	1 mark
(c)	Wash your eye with water	1 mark
2 (a)	1 point for correct plotting of points. 1 point for correct line of best fit (not dot to dot)	2 marks
(b)	The greater the mass the greater the deflection or reverse argument	1 mark
(c)	10mm (accept 9.5mm – 10.5mm). MUST have unit	1 mark
3(a)	7; 2,8,3; 18	All correct = 1 mark
(b)	Electrons arranged as 2,5. Any standard symbols for electrons accepted (dots, crosses, e)	1 mark
(c)	i) H ₂ O ii) CO ₂ iii)H ₂ SO ₄ iv)HCl	1 mark for each correct pair. Max 2 marks
4(a)	Bubbling OR fizzing OR gas produced (can only have one of these)/ heat produced/ metal dissolved/ new product produced	Two correct answers = 1 mark max 1 mark
(b)	Magnesium + hydrochloric acid → magnesium chloride + hydrogen gas. There MUST be an arrow (not =) and students are not to mix formulae with the word equation.	1 mark
5 (a)	Mercury; oxygen; neon; hydrogen	1 mark for each correct pair. Max 2 marks
(b)	ACIDIC = battery acid, lemon juice, rain water BASIC = dishwasher powder, oven cleaner, shampoo NEUTRAL = distilled water, salt water	1 mark
(c)	Dishwasher powder	1 mark

(d)	Test solution with blue litmus paper (or UI) If acid, litmus will turn red (If UI acid will turn it yellow/red/orange) Accept 'compare to colour scale or chart'	1 mark 1 mark															
6(a)	A = ash/ lava/ rocks, B= (side) vent C = magma chamber/ magma	1 mark															
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(d)	Australian – Indian (plate). Pacific (plate)	1 mark															
(e)	This is an area where plate boundaries meet. When the two boundaries meet, one slides under/ moves under/ subducts another and this causes volcanoes	1 mark = plate boundaries + causes volcanoes 1 mark for subduction/ slides under/ moves under															

7(a)	Acid rain (not just 'rain' or 'water')/ glacier/ freeze thaw/ wind/ heat changes/onion skin weathering / plant roots/ biological/ chemical/ mechanical	One mark per correct answer. Max 2 marks
(b)	Transported by rivers/ erosion ; then deposited at coast. not just 'rain' or 'water', must give indication of water flow.	River identified as transporter; erosion = 1 mark. Deposited/ deposition = 1 mark
8 (a) i	Animal dies and is covered by sediment. Sediment becomes sedimentary rock (Accepted ideas of organism being covered in layers of sand/sediment ; also the idea that organism now under pressure) Shell minerals dissolved or removed by water/ impression of shell left in rock New minerals replace original minerals	2 ideas = 1 mark. 4 ideas = 2 marks
(a) ii	Sedimentary	1 mark
(b) i	Cooled/ solidified : lava/ magma	1 mark
(b) ii	Destroyed when molten	1 mark
(b) iii	Granite crystals will be larger/ basalt crystals smaller	1 mark
(c)	i) Starfish circled ii) X	1 mark (both required)
(c) iii	A (coastal lake)	1 mark
9 (a)	Put collar around the print : pour in plaster (of Paris) Students must mention the collar (or some other kind of barrier to hold in plaster of Paris/other mould material	1 mark
(b)	Photograph/drawing/sketch/detailed measurements	1 mark
(c)	Length/ width/ tread pattern/ scratches or flaws/ wear patterns (supernate or pronate wear)/ brand print or writing on tread/weight=depth	Two identified = 1 mark. Three identified = 2 marks
10 (a)	B	1 mark

(b)	F	1 mark
(c) i	D	1 mark
(c) ii	A & D matched/ were the same	1 mark
11 (a)	Cells the wrong way round	1 mark
(b)	Correct circuit drawn with switch in open position, no gaps at components or corners, power supply can use the '2 cells' symbol OR the battery (dotted line) symbol	1 mark
(c) i	Series	1 mark
(c) ii	You cannot leave the headlights on when ignition is off/ so you don't waste the battery when the ignition is off	1 mark
(d)	If one blows the other stays on both are equally bright	1 mark 1 mark
12 (a) i	Electrons	1 mark
(a) ii	Attract : repel	1 mark
(b)	The paint is attracted to the car body; Less wastage; More even coating	Any two ideas 2 marks
13 (a)	A and E	Both needed for 1 Mark
(b)	Like poles repel	1 Mark
14 (a)	The weight of.....B The force pulling.....A The friction between.....C	All right for 1 Mark
(b) i	Any ONE of: Bigger sail/ lubricate/wax/oil ski/lighter/engine/motor/streamline NOT less skis(sinks) or more skis (more friction)	1 Mark
(b) ii	Friction	1 Mark
(c)	D Right (→) : Friction between shoe and floor causes a reaction force which pushes the foot/shoe forwards.	1 Mark
(d)	Diagram: Shoe on surface with Newton meter Method: Steadily pull shoe Read Newton meter Repeat for the next shoe type NOT change surface OR Tilt surface and measure angle or height	1 Mark 1 Mark
(e)	Answer must link increasing roughness with increase in force of friction OR Vice Versa MUST mention friction and not slipperyness but roughness	1 Mark

(f)	(i) A	1 Mark	
	(ii) There is a greater(resultant force) to the right OR bigger numbers right than left	1 Mark	
15 (a)	A = Producer/Plant. At start of food chain/must make own food	1 mark	
(b)	Any TWO suitable (Producer to Top consumer) ONLY GIVE 1 MARK IF DO NOT HAVE CORRECT ARROWS. MUST JOIN AT LEAST THREE THINGS AND START WITH A PRODUCER.	1 Mark each (max 2 marks)	
(c)	A herbivore	Grubs/aphid/snail/small animal	1 Mark for the first three rows
	A carnivore	Small birds/large birds/beetles/(B)	
	A predator	Beetles/small birds/large birds/(B)	
	TWO organisms that compete for food	Snails or aphids or grubs or small animals/small birds or large birds or (B)/ Large birds & B/ B or beetles or grubs/ beetles and small birds	1 Mark for the last two rows
	A third-order consumer	Large birds/(B)	
(d) i	Decomposer Accept (top/fourth)consumer or predator (due to ambiguity of question)	1 mark	
(d) ii	To release nutrients/ recycle nutrients	1 mark	
16 (a)	Light intensity	1 mark	
(b)	ANY TWO FROM High food supply; low light intensity; low predation	1 mark	
(c)	Both want/need the same resources/food from the environment Must say what they need e.g. food	1 mark	
(d) i	Reduces/ decreases NOT dies out or all die	1 mark	
(d) ii	Less food = less chance of survival/ less food = less energy available (for reproduction) NOT <u>no</u> food/ run out/ eats <u>all</u> the food ALSO beetles do not eat/kill/annihilate/exterminate/euthanize the woodlice!!!	1 mark	