

## Assessment Schedule 10C 2010

/ means OR eg. green / blue – answer needs green OR blue

( ) means additional, not really required eg. Gauze (mat) – gauze would be sufficient

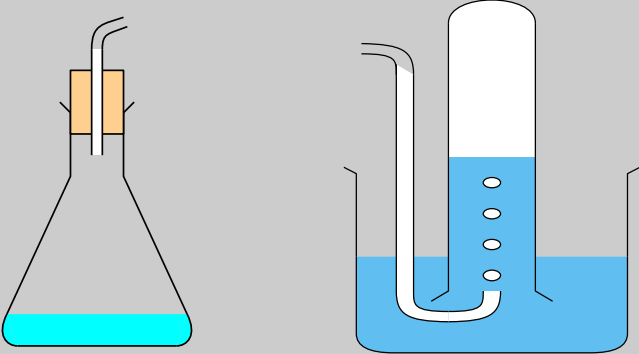
: means AND eg. red : hot - answer needs red and hot.

Question	Evidence	Marks
One (a)	Temperature (of the water)	1 mark
(b)	Adjust current OR voltage / change distance between bulb and the experiment / use screens of varying opaqueness / use different power/wattage light bulbs	
(c)	As light intensity increases the (average) rate of photosynthesis increases UNTIL (average) rate levels off at 12 Units / 24 bubbles (1 mark for increase, 1 mark for realizing it levels off)	2 marks
(d)	To allow averages to be calculated /to make results more reliable (accept more accurate)	1 mark
(e)	Photosynthesis: process/reaction by which a plant makes its own food OR sugar OR starch / traps energy from the sun AND Respiration: process/reaction in which energy is released from food (in cells)	1 mark
(f)	At 25°C the difference between food manufactured (by photosynthesis) and food used (by respiration) is biggest / maximum : rate of growth is higher OR uses data from graph to justify the answer of bigger difference between the 2 processes	1 mark

	Organ	Name	Role	
Two (a)	A	Gall bladder	Stores bile	3 marks*
	B	Stomach	stores food/ mechanical digestion / chemical digestion	2 marks – all correct
	C	Large intestine / colon	(re)absorbs water	1 mark :
	*Award the additional 1 mark for ONE good description of a role rather than just a statement eg digestion of protein occurs in the stomach using acid / proteases; bile aids the digestion of fats by emulsifying them etc			any 4 boxes correct
(b)	Protein			1 mark for (b) OR (c)
(c)	OR sample in tube / sample with water add Biuret			
(d)	(pale) blue to purple / violet (both needed) (i.e. correct colour change)			1 Mark
(e)	Nothing to test so a negative result: (pale) blue (i.e. correct colour)			1 marks
Three (a)	Iron / soft iron / steel			1 mark
(b)	Push/close switch to <b>complete circuit</b> Electromagnet <b>makes magnetic field / becomes a magnet</b> Attracts armature & hammer hits bell/gong Circuit broken / incomplete Arm springs back <b>Process repeats</b> (i.e  “1 dong” = 1 mark (circuit / magnet / attracts and hits) Multiple dongs (ding-dong-ding-dong) = 2 marks – as above plus idea of circuit breaks and arm springs back because of the spring OR magnet is no longer a magnet 3 marks – all the key ideas are correct 😊 (ding-a-ling!!)			3 marks
(c)	(i) so drops repel each other and spread evenly			1 mark

	(ii) sand becomes positively charged (as passes over plate) and is attracted to negatively charged glue (Need ideas of opposites attract)	1 mark
Four (a)	(i) A (ii) B (iii) B (All 3 = 2 marks, 2 correct = 1 mark)	2 marks
(b)	(i) No change to weight (1 mark) air resistance increases (1 mark)	2 marks
	(ii) Speed decreases / terminal velocity is decreased	1 mark
Five (a)	A III (accept(IV)                      B VII                      C VIII ( accept (VII))	2 marks all correct
(b)	(i) Sally 40, Sue 56	1 mark = 2 /3 all correct
	(ii) Accept E, SE or S (can be drawn on map)	
(c)	<u>Why do earthquakes occur:</u> <b>Movement of rock / crust</b> (at plate boundary/fault line) (1 mark) <b>due to stored energy / strain / sudden release of energy</b> etc (1 mark) idea that ground is moving due to a named feature eg plate boundary is a mark if well expressed)	2 marks
	<u>Where:</u> At the focus (1 mark) At/near plate boundaries (1 mark)	2 marks
	<u>Difference:</u> Focus = where earthquake occurs / hypocenter AND Epicentre = spot on ground level above focus	1 mark
	Seismometer measures arrival and size of waves (to produce a seismograph) <b>OR</b> Richter/Mercalli scales are used to record intensity/damage – eg Mercalli scale records visual effects of an earthquake or Richter scale records energy released.	1 mark

Six (a)	No oxygen/air ( both a and b needed for 1 mark)	1 mark
(b)	No water	
(c)	Difference: More rust / corrosion in tube 2 (or less in 1) Reason: corrosion/rusting is faster in sea water / salty environment ( difference and reason needed for 1 mark)	1 mark
(d)	To prevent oxygen entering tube 3 (1 mark) water entering tube 4 (1 mark) ( tube numbers must be specified for two marks) If a general answer about air and water is made then 1 mark ).	2 marks
(e)	Any TWO from <ul style="list-style-type: none"> <li>• Type of metal / need to use same metal</li> <li>• Temperature (but NOT HEAT)</li> <li>• Left for the <b>same time</b></li> <li>• Agitated / not agitated</li> <li>• Same size nail accepted ☹ ..... getting desperate here!</li> </ul> Water level <b>in tubes 1 and 2</b> (tubes <u>must</u> be specified)	1 mark

<p>Seven (a)</p>	<p>Any TWO from</p> <ul style="list-style-type: none"> <li>• Workable apparatus to MAKE the gas (no leaks)</li> <li>• Correctly labeled reactants – hydrogen peroxide + MnO<sub>2</sub> / manganese dioxide</li> <li>• Suitable apparatus to COLLECT the gas – displacement of water</li> </ul> <div style="text-align: center;">  </div> <p>(2 = 2 marks, 1 = 1 mark)</p>	<p>2 marks</p>
<p>(b)</p>	<p>Hydrogen peroxide → water + oxygen (ignore any reference to the manganese dioxide)</p>	<p>1 mark</p>
<p>(c)</p>	<p>Glowing splint / light splint and blow out Put in gas If it relights, it is oxygen / oxygen present</p>	<p>1 mark</p>