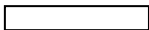
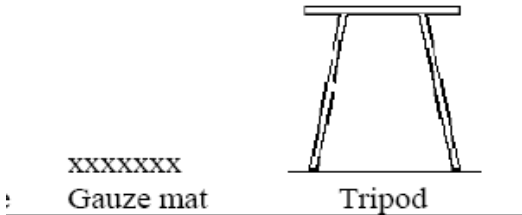


Assessment Schedule 9B 2007

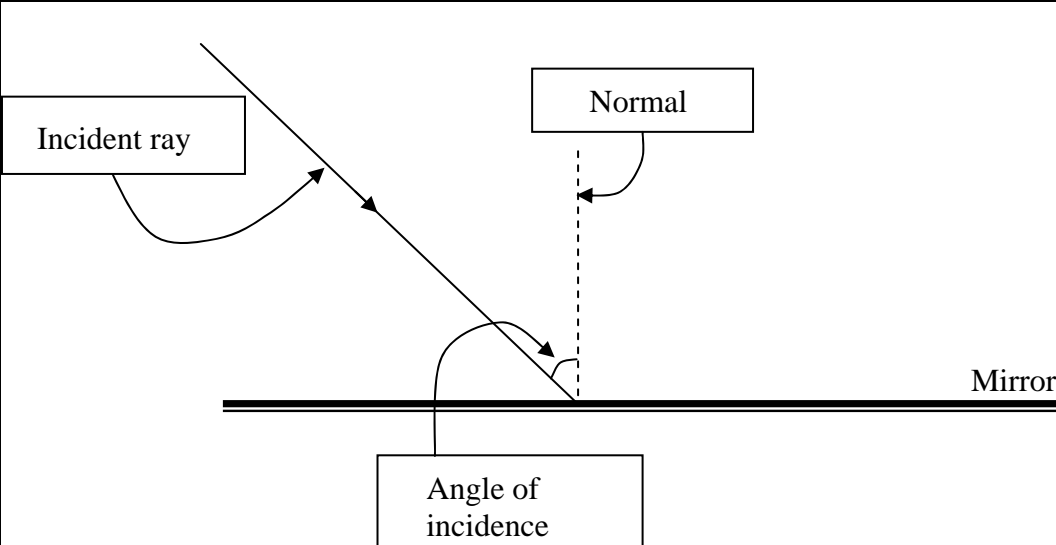
/ means OR eg. green / blue – answer needs green OR blue

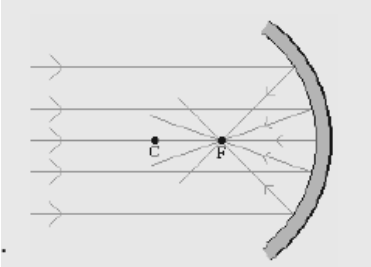
() means additional, not really required eg. Gauze (mat) – gauze would be sufficient

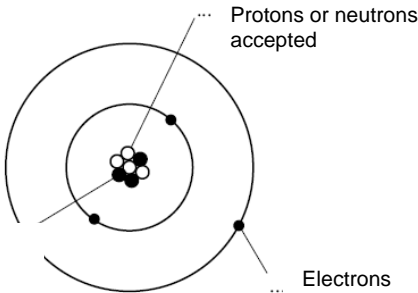
: means AND eg. red : hot - answer needs red and hot.

Question	Evidence	Marks
1 (a)	<p>Heat proof mat symbol </p> <p>Gauze mat and tripod symbol</p> <p></p> <p>Correctly labelled beaker and measuring cylinder</p>	3-5 correct = 1 mark
(b)	<p>Correct diagram of a Bunsen burner with a safety mat, gauze (mat), tripod, beaker, and thermometer or measuring cylinder. All correctly labelled.</p>	All correct or one mistake = 2 marks 2 mistakes = 1 mark > 2 mistakes = 0 marks
(c)	<p>Check that both lines are plotted correctly, Allow 2 mistakes per line: blue flame must have dotted line. Crosses not dots – minus 1 mark for dots.</p>	1 mark per line – allow for up to 2 mistakes per line
(d)	Open air hole / turn collar to let in more air/oxygen	1 mark
(e)	<ol style="list-style-type: none"> 1. same Bunsen burner 2. same amount of water 3. same distance between beaker and flame 4. same starting temperature 5. same beaker 6. same type of water (i.e. distilled) <p>Or any other relevant answer</p>	3 variables = 2 marks 2 variables = 1 mark 0-1 = 0 marks
(f)	70° C (units needed) +/- 2	1 mark
(g)	<p>The water heats up quicker/faster using the blue flame OR the blue flame takes less time to heat the water. Must mention 'water'.</p>	1 mark

Question	Evidence	Marks
2(a)	The liquid moves/rises up the thermometer OR liquid expands and moves up the thermometer	1 mark
(b)	40°C 70°C -10°C 25°C for all temperatures correct answers are as stated or +/- 1°C	3 or 4 correct = 1 mark
(c)	B	1 mark
(d)	Because when someone / something is then put into the bath the water will rise / overflow / be displaced	1 mark
(e)	Place the rock in a semi filled measuring cylinder and measure the increase in volume of the water on the measuring cylinder	1 mark
3(a)	B	1 mark
(b)(i)	Any 2 correct statements: must have idea of heat in answer and another correct statement about the greenhouse effect.	1 mark
(b)(ii)	Must have idea of suns heat / UV rays trapped by carbon dioxide/gases cause earth to heat up / or some other change. (need 3 ideas).	1 mark
4(a)	i. Cola ii. milk iii. tea iv. water	All correct = 2 marks 2 or 3 = 1 mark
(b)	Movement example = Animals can run R = Reproduction S G = growth and example = seeds becoming tree. R= Respiration and example = converting chemicals to warmth and energy. E N = Nutrition and example = whales eat krill.	3 /4= 1 mark 5/6/7 = 2 marks
(c)	M R Real mouse can respire (make energy), toy one can't S Real mouse can sense, toy can't G Real mouse can grow, toy can't R Real mouse can reproduce, toy can't E Real mouse can excrete, toy can't N Real mouse can eat, toy can't	Any 2 correct statements = 2 marks (needs to refer to real mouse + toy mouse) Any 1 correct statement in reference to either toy or real mouse = 1 mark

Question	Evidence				Marks
5(a)	i. Barrel ii Stage iii Coarse focus knob			Iv Eye piece lens V Revolving nose piece Vi Lamp	5/6 =2 marks 3/4 =1 mark
(b)	Clean slide (or get new slide) Make sample small enough to be transparent /single layer of onion cells Drop H ₂ O on it or iodine Cover slip on Avoid bubbles by lowering cover slip gently.				Full answer with only one point missing=2 marks Partial answer must have 2 points =1 mark
(c)	Plant cell				1 mark
(d)	i. Vacoule	ii. cell wall	iii.chloroplast	iv. nucleus	3 / 4 = 1 mark
(e) (f)	Cell membrane + nucleus				1 / 2 right = 1 mark
6(a)	Sun, bulb, glow worm				All correct =1 mark but must have no reflectors circled to get the mark
(b)	Light source produce its own light and light reflectors reflect light only.				2 marks for 2 correct statements 1 mark for one correct statement
(c)(i)					Any 2 correct = 1 mark

Question	Evidence	Marks
(c)(ii)	A clearly drawn reflection ray with an arrow, approximately the same angle, or angle labelled the same.	1 mark
(c)(iii)	Angle of incidence equals the angle of reflection	1 mark
(d)(i)	concave	1 mark
(d)(ii)	 <p>F or C not needed Just simple rays needed – with arrows showing direction.</p>	1 mark
(e)	i. car/torch light, shaving mirrors, satellite dish or any correct answer ii. security mirror back mirror, any correct	1 mark – must have ei and eii correct
7(a)	B	1 mark
(b)	Sound waves hit a surface and reflect / bounce back to the person. Diagram any appropriate diagram- show rays hitting person	Either / or = 1 mark
(c)	Foam, curtains, or any other correct statement – soft items	1 mark
(d)	The material/s <u>absorb more noise</u> and these materials will reflect <u>less</u> noise/sound	2 marks for both Statements 1 mark for correct statement
(e)	The volume decreases (not gets quieter) The pitch decreases	1 mark
8(a)	i. melting ii. Sublimation iii. Gas iv. Condensing /condensation v. liquid	5 correct = 2 marks 3 / 4 correct = 1 mark
(b)	i. melting ii. condensation iii. freezing	2 / 3 correct = 1 mark

Question	Evidence	Marks
(c)	<p>Water is denser than air. Because the particles are much closer together in water than in air. / accept more dense This makes it harder to move as our bodies have to push the particles aside so we can move. In air the particles are spaced far apart so it is easier for us to move around. Any 2 ideas = 2 marks</p>	2 marks
(d)	 <p>Protons or neutrons accepted</p> <p>Electrons</p>	2 / 3 correct = 1 mark
(e)	Neutrons	1 mark
(f)	C	1 mark
9(a) (b)	<p>9a = A 9b = D or B accept either</p>	1 / 2 correct = 1 mark
(c)	<p><u>Differences</u> note student must name the type of teeth ie not just say "big teeth" Large canines No canines No top incisors Large molars Eyes on side of head/ front of head Diastema or presence of the gap described</p> <p><u>Reasons</u> Eats meat Doesn't eat meat Uses palette and bottom incisors to rip out grass To grind grass up So the one which is a herbivore can see its predators coming to eat it and it can escape.</p>	4 marks
10(a)	<p>i gall bladder ii oesophagus iii. Stomach iv. Pancreas v. Small intestines vi large intestines</p>	5/6 = 2 marks 3 / 4 = 1 mark
(b) (c i)	<p>(b) = stomach (c i) = small intestine (c ii) = large intestine</p>	2 / 3 = 1 mark

Question	Evidence	Marks
(d)	Starch/carbohydrate	1 mark
(e)(i)	1. add small amount of water to crushed biscuit 2. add small amount of Benedicts solution 3. Stand beaker in a hot water bath / heat beaker carefully over flame HAD TO MENTION HEAT	Need 3 steps to get 1 mark
(e)(ii)	Green / orange / red	1 mark
11(a) (b)	11a = 1979 11b = Hinau/low land flax	2 correct for 1 mark
(c)	Any statement which backs up the plant type chosen e.g., • Beech: Heavy flowering occurs every 2-4 years. • Hinau: In most years light flowering occurs.	1 mark
(d)	i, leaves ii branch iii trunk iv roots	3 / 4 = 1 mark
(e)	Any 2 of the following Roots – anchor the plant in the soil / take in water, (oxygen), and nutrients Branch – holds up the leaves to the light / sun Leaves – where photosynthesis occurs / makes food for the plant Trunk – supports / holds branches and leaves up to the light / sun (had to mention light or sun)	2 marks total – 1 mark for each tree part's function
12(a)	i, 4 ii. 2 iii. 1 iv. 5 v. 3	3/4/5 = 1 mark
(b)	cold	1 mark
(c)	3 and 7	1 mark (must have both numbers correct)
(d)	B	1 mark
(e)	1 day / 24 hours	1 mark
(f)	C	1 mark

Question	Evidence	Marks
(g)(i)	summer	1 mark
g(ii)	The south pole is tilted towards the sun so the sun rays hit it more directly	1 mark
13(a)	Any 1 of: <ul style="list-style-type: none"> • malleable/can be shaped • good heat conductor • high melting point • strong • non-reactive, i.e., doesn't rust • easily cleaned • other correct responses may be possible 	1 mark
(b)	Wood is a heat insulator, i.e., it doesn't conduct heat well / other correct response	1 mark
		80 marks