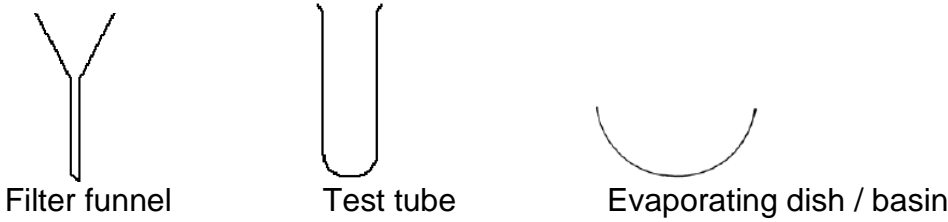
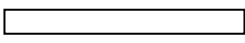
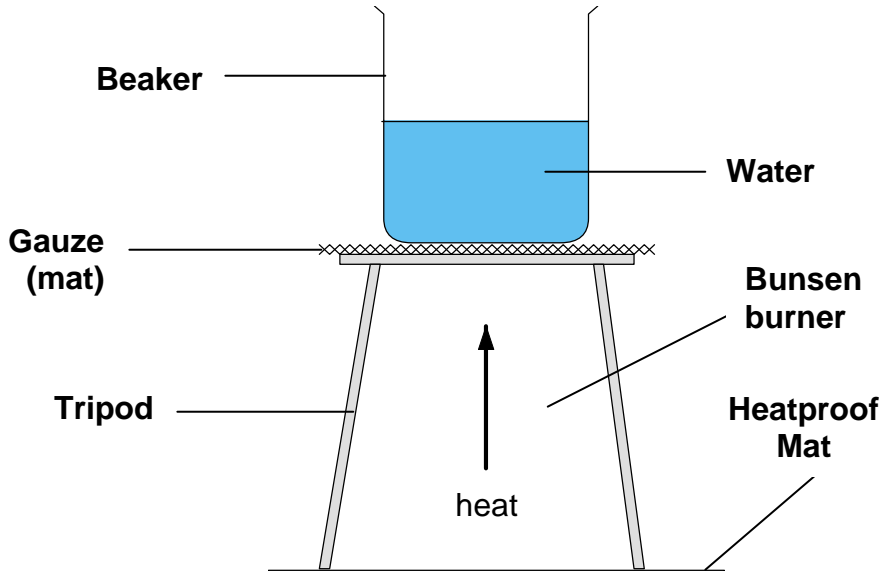
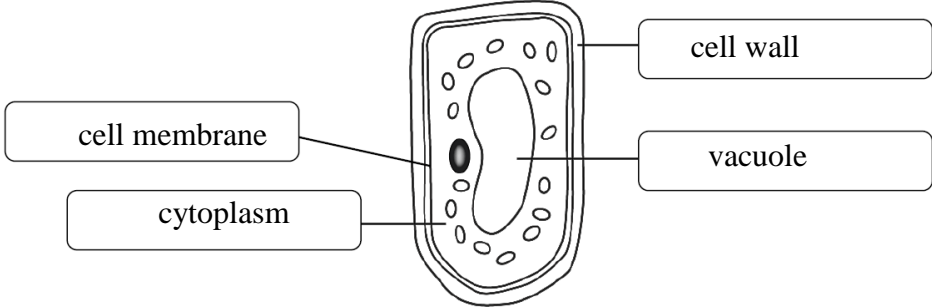


Assessment Schedule 9B 2010

/ 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.

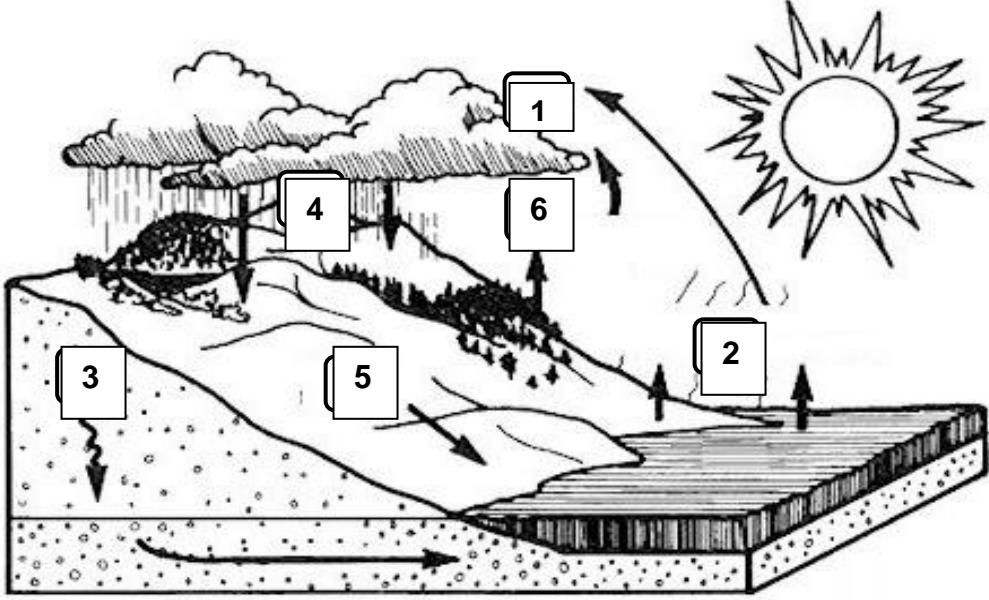
Question	Evidence	Marks
1a	She is wearing safety glasses Her hair is tied back The test tube is pointing away from her She is concentrating/focused on the experiment 1 mark each for a way that she is doing the experiment safely.	2 marks
1b	Correct 2D symbols  <p>Filter funnel Test tube Evaporating dish / basin</p>  <p>Heatproof mat</p> <p style="text-align: center;">↑ heat</p> <p style="text-align: center;">Bunsen burner</p> 3 or more correct = 1 mark.	1 mark
1c	Drawing 2D using correct symbols and labeled as indicated below  <p>Beaker Water</p> <p>Gauze (mat) Bunsen burner</p> <p>Tripod Heatproof Mat</p> <p style="text-align: center;">↑ heat</p>	2 marks

	<p>2D drawing with at least 4 correct symbols (water not included) / 2D drawing with at least 3 correct symbols and some labels – 1 mark</p> <p>2D drawing with only 1 symbol/water drawn incorrectly and 1 label missing – 2 marks</p> <p>All drawn with no big gaps between pieces of equipment etc.</p>	
1d	<p>Bar graph completed for students 1 and 2 – some minor mistakes or may not have a key – 1 mark</p> <p>Bar graph completed all correct for students 1 and 2 with a labeled key (no mistakes) – 2 marks</p>	2 marks
2a	 <p>3 or 4 correct for one mark.</p>	1 mark
2b	<p>2 of cytoplasm, cell membrane, nucleus. 2 correct – 1 mark</p>	1 mark
2c	<p><i>Red Blood Cells</i> Feature = concave or disc shaped surface / flexible / no nucleus Feature related to function = concave surface / large surface area to absorb oxygen Flexible structure to fit through blood vessels easily. No nucleus to fit through blood vessels easily.</p> <p><i>Nerve cell (neurone)</i> Feature = Long length / many branches Feature related to function = long length is related to carrying signals over distance Many branches so they can communicate with / connect with many other cells.</p> <p>Feature OR function identified for either nerve or red blood cell = 1 mark Feature and function of either nerve or red blood cell = 2 marks</p>	2 marks

3a	<p>Small plants → Termite → Lizard → Rattlesnake → Eagle Small plants → Termite → Lizard → Eagle Small plants → Termite → Lizard → Coyote</p> <p>Cactus fruit → Termite → Lizard → Rattlesnake → Eagle Cactus fruit → Termite → Lizard → Eagle Cactus fruit → Termite → Lizard → Coyote</p> <p>Any correct food chain – doesn't have to have arrows.</p>	1 mark
3b	Coyote	1 mark
3c	Lizard, Rattlesnake. 1 correct – 1 mark	1 mark
3d (i) 3d (ii)	<p>Kangaroo rat numbers will INCREASE because there is no animal eating them / their predator is no longer there.</p> <p>Eagle numbers will DECREASE because one of their food sources has been removed.</p> <p>Mark 3d(i) and 3d(ii) together. If they state Kangaroo rat numbers will INCREASE and Eagle numbers will DECREASE = 1 mark OR If they get one of 3d(i) or 3d(ii) fully correct including explanation = 1 mark.</p> <p>2 marks = state Kangaroo rat numbers will INCREASE and Eagle numbers will DECREASE and correctly explains 1 of these.</p>	2 marks
4a	Kinetic, heat, sound. 2 correct for 1 mark.	1 mark
4b	The % of energy that is useful is greater / less energy is being wasted / % of useful energy released from a machine.	1 mark
5a	<p>Tablets dissolves / disappears / gets smaller and smaller Bubbles appear / gas is given off Water changes colour (????) Temperature decreases</p> <p>2 correct observations given – 1 mark</p>	1 mark

5b	Chemical change (1 mark) Because a new substance is formed / it can't be reversed / it is a permanent change / a chemical reaction occurs / a gas was released / the products are different to the reactants (1 mark).	2 marks
6	It is changing from ice to water / changing from solid to liquid / changing state / ice is melting (not accepted - "defrosting")	1 mark
7a	Distillation	1 mark
7b	It cools down the water vapour / steam and changes it back /condenses it back into liquid / water as it passes through the condenser. MUST have idea of cooling/condensing.	1 mark
7c	<ol style="list-style-type: none"> 1. The water is heated and is turned into water vapour/steam (as it has the lower boiling point) 2. Water vapour is then condensed back into liquid form as it goes through the (cool) condenser. 3. The water is collected in a beaker leaving the ink behind (in the flask). 4. This is able to occur because water and ink have different boiling points. 	<p>2 marks = 3-4 points</p> <p>1 mark = at least 2 points</p>
8a 8b	8a = plane 8b = normal Both correct = 1 mark	1 mark
8c 8d	8c = incidence 8d = be doubled 1 correct = 1 mark – check students scripts for this one	1 mark
8e	Green objects / the car <u>absorb all colours</u> of light, <u>except green</u> which is <u>reflected</u> .	1 mark
9a	Bat	1 mark

9b	Any value identified from 5 Hz – 29 Hz	1 mark
9c 9d	9c = A 9d = C	Both correct = 1 mark
10a	<p>(i) making aeroplanes = C, D, E, F. (must have 2 correct)</p> <p>(ii) Soft drink cans = B, C, D, E, F. (must have 2 correct)</p> <p>(iii) Window frames = C, D, E, F. (must have 2 correct)</p> <p>Any incorrect cancels out a correct answer.</p> <p>Need 2 out of i-iii correct for 1 mark.</p>	1 mark
10b i	<p>○ neutron</p> <p>× electron</p> <p>Shell / energy level / orbit / orbital</p> <p>3 correct = 1 mark</p>	1 mark
10b ii 10b iii	<p>ii) 3</p> <p>iii) number of protons + number of neutrons</p> <p>1 correct = 1 mark</p>	1 mark

10c	<p>Must only have 2 X in first shell, 8 X arranged in second shell and 1 X in third shell.</p> <p>All correct – 1 mark</p>	1 mark
10d	<p>E = element C = compound M = mixture</p> <p>Smoke – M Calcium – E Pure water – C Sodium chloride – C Air – M Carbon dioxide – C Gold – E River water – M Copper – E</p> <p>6 correct = 1 mark</p>	1 mark
11a	<p>4 out of 6 correct labels = 1 mark</p> 	4 or more correct = 1 mark
11b	<p>1 = High / anticyclone 2 = Isobar 3 = Warm front 4 = Low / depression</p> <p>2 or 3 correct = 1 mark 4 correct = 2 marks</p>	2 marks

Paper B – on front on paper: Question 2 is actually worth 4 marks and Question 4 is worth 4 marks (error on front of paper but that is how it was marked as per final assessment schedule).