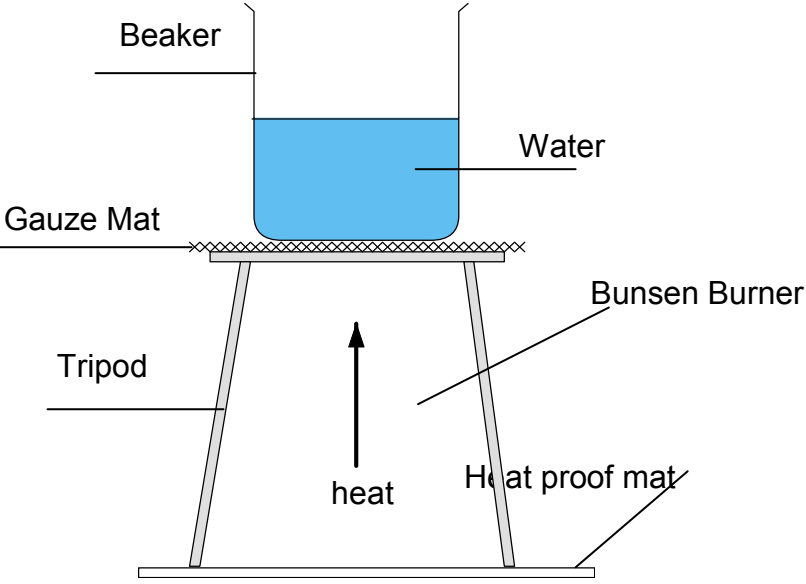
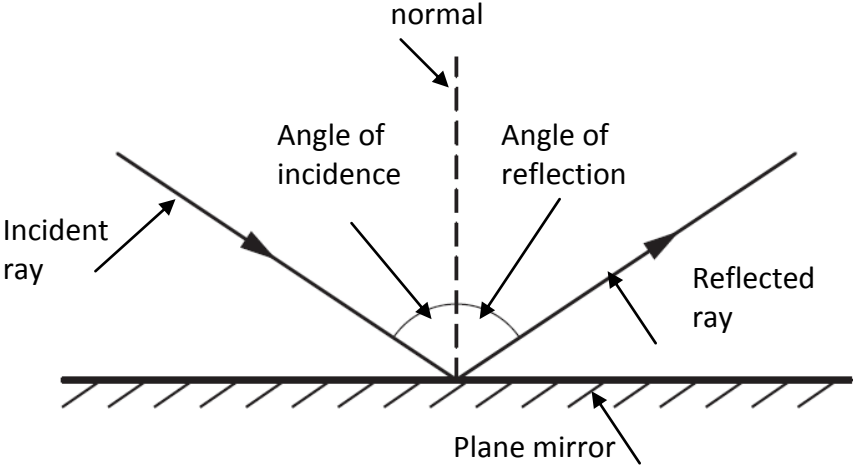
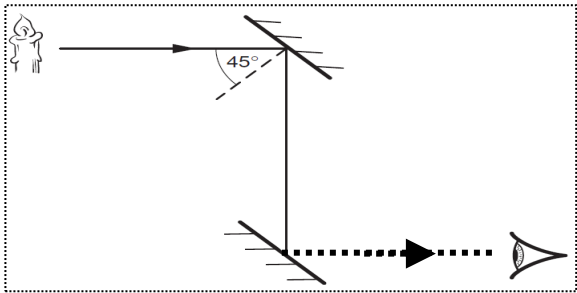


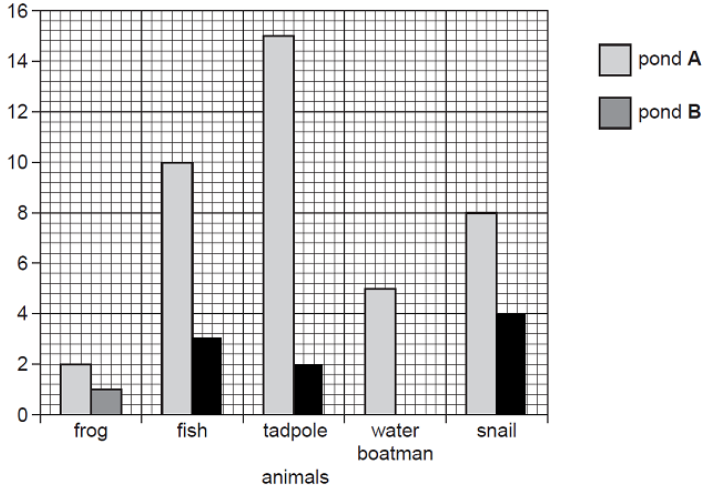
Assessment Schedule 9B 2009



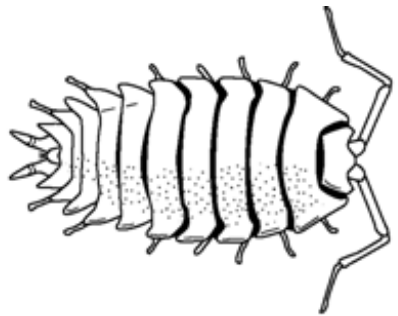
/ means OR eg. green / blue – answer needs green OR blue
 () means additional, not really required eg. Gauze (mat) – gauze would be sufficient
 : means AND eg. red : hot - answer needs red and hot.

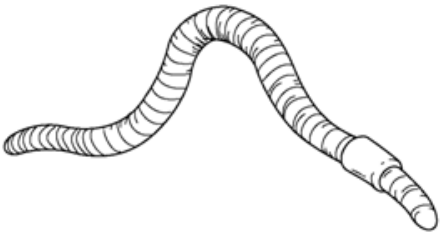
Question	Evidence	Marks
One	<ul style="list-style-type: none"> • Danger is identified & described [1 mark each] • Suitable safety rule is given [1 mark each] <p>Rule to be appropriate to the danger eg hair could catch fire / long hair should be tied back for experiments</p> <p>Did not accept using tongs to pick up hot Bunsen burner. Also if student talked about person looking into test tube – to get full marks they HAD to mention safety glasses in their safety rule.</p>	4 marks
Two	<p>(a)</p> <div style="text-align: center;">  <p>The diagram shows a laboratory setup for heating a liquid. At the base is a rectangular heat proof mat. On top of it stands a tripod. A Bunsen burner is positioned below the tripod, with an arrow pointing upwards labeled 'heat'. A gauze mat is placed on top of the tripod's legs. A beaker is placed on the gauze mat, containing a blue liquid labeled 'Water'. Labels with leader lines point to the Beaker, Water, Gauze Mat, Tripod, Bunsen Burner, and Heat proof mat.</p> </div> <p style="text-align: center;">3 symbols correct(no labels) = [1 mark] 5 symbols correct (some labels) = [2 marks] All symbols correct, all labeled and MUST have water labeled = [3 marks]</p> <p>Shouldn't have shading/needs to be tidy/must have Bunsen burner labeled/must label as water not liquid.</p>	3 marks
	<p>(b)</p> <ul style="list-style-type: none"> (i) Beaker/Conical Flask (ii) Boiling Tube/Test Tube (iii) Measuring Cylinder (iv) Test Tube Rack (v) Tripod/Gauze Mat/Clamp Stand (vi) Test Tube <p style="text-align: right;">3-4 correct = [1 mark] 5-6 correct = [2 marks]</p>	2 marks

<p>Three</p>	<p>B C A B A</p>	<p>5 correct = [2 marks] 3-4 correct = [1 mark]</p>	<p>2 marks</p>																				
<p>Four</p>	<p>(a)</p>  <p>3-4 correct = [1 mark] 5-6 correct = [2 marks]</p> <p>(b)</p>  <p>Correctly drawn line = [1 mark] Correctly drawn line and arrow included = [2 marks]</p> <p>(c) reflected THEN the right way up Have to have both correct for [1 mark]</p>	<p>2 marks</p> <p>2 marks</p> <p>1 mark</p>																					
<p>Five</p>	<table border="1" data-bbox="331 1435 1323 1921"> <thead> <tr> <th data-bbox="331 1435 663 1503">A</th> <th data-bbox="663 1435 995 1503">B</th> <th data-bbox="995 1435 1323 1503">C</th> </tr> </thead> <tbody> <tr> <td data-bbox="331 1503 663 1570">✓</td> <td data-bbox="663 1503 995 1570"></td> <td data-bbox="995 1503 1323 1570"></td> </tr> <tr> <td data-bbox="331 1570 663 1637"></td> <td data-bbox="663 1570 995 1637">✓</td> <td data-bbox="995 1570 1323 1637">✓</td> </tr> <tr> <td data-bbox="331 1637 663 1704"></td> <td data-bbox="663 1637 995 1704">✓</td> <td data-bbox="995 1637 1323 1704"></td> </tr> <tr> <td data-bbox="331 1704 663 1771">✓</td> <td data-bbox="663 1704 995 1771">✓</td> <td data-bbox="995 1704 1323 1771"></td> </tr> <tr> <td data-bbox="331 1771 663 1839"></td> <td data-bbox="663 1771 995 1839"></td> <td data-bbox="995 1771 1323 1839"></td> </tr> <tr> <td data-bbox="331 1839 663 1906">✓</td> <td data-bbox="663 1839 995 1906"></td> <td data-bbox="995 1839 1323 1906">✓</td> </tr> </tbody> </table> <p>3-5 correct = [1 mark] 6-7 correct/any 2 columns fully correct = [2 mark] Any incorrect answer negates a correct mark</p>	A	B	C	✓				✓	✓		✓		✓	✓					✓		✓	<p>2 marks</p>
A	B	C																					
✓																							
	✓	✓																					
	✓																						
✓	✓																						
✓		✓																					

	solid	Liquid	Gas	liquid	
Six (a)	All correct = [1 mark]				1 mark
Six (b)	✓				2 marks
	✓		✓		
				✓	
			✓	✓	
	3 correct = [1 mark] 4-5 correct = [2 marks] Any incorrect answers cancelled out correct answers				
Six (c)	<p style="text-align: center;"> 3-4 correct = [1 mark] 5 correct = [2 marks] </p>				2 marks
Seven	(a) (i) grams (g) (ii) liters (L) (iii) kilometers (km) (iv) centimeters (cm)				2 marks
	2 correct = [1 mark] 3-4 correct = [2 marks] Can write symbols (but must be correct i.e. L) OR write the words				
	(b) 30, 15, 53, 38, 25.				1 mark
4 or 5 correct = [1 mark]					
(c) i = 2 ii = 135 iii = 15.3 cm OR 153 mm				2 marks	
Any 2 correct = [1 mark]					

	All correct = [2 marks]																		
Eight	(a) Cu	1 mark																	
	(b) Electrical	1 mark																	
	(c) copper = good conductor (heat/electrical); gold = stays shiny, helium = lighter than air, mercury = a liquid @ room temperature 2 or 3 = [1 mark] All correct = [2 marks]	2 marks																	
Nine	(a) X = cytoplasm Y = vacuole Z = cell wall 2-3 correct = [1 mark]	1 mark																	
	(b) Stores water/gives cell its shape OR rigid structure/supports plant	1 mark																	
	(c) Traps sunlight for photosynthesis to occur	1 mark																	
	(d) (i) coverslip (ii) microscope slide / slide (iii) specimen/ thin piece of plant OR drop of water/dye/stain/iodine/ 2-3 correct = [1 mark]	1 mark																	
	(e) 1. Place a <u>thinly sliced</u> specimen/onion membrane on the slide 2. Place a drop of water/stain on the specimen 3. Hold the cover-slip at <u>45 degrees</u> and then lower it slowly to <u>avoid air bubbles</u> . Vague method = [1 mark] Have to have 2 or 3 underlined points = [2 marks]	2 marks																	
Ten	(a) Frog	1 mark																	
	(b)  <table border="1"> <caption>Bar Chart Data</caption> <thead> <tr> <th>Category</th> <th>Pond A</th> <th>Pond B</th> </tr> </thead> <tbody> <tr> <td>frog</td> <td>2</td> <td>1</td> </tr> <tr> <td>fish</td> <td>10</td> <td>3</td> </tr> <tr> <td>tadpole</td> <td>15</td> <td>2</td> </tr> <tr> <td>water boatman</td> <td>5</td> <td>0</td> </tr> <tr> <td>snail</td> <td>8</td> <td>4</td> </tr> </tbody> </table> 1 mistake = [1 mark]	Category	Pond A	Pond B	frog	2	1	fish	10	3	tadpole	15	2	water boatman	5	0	snail	8	4
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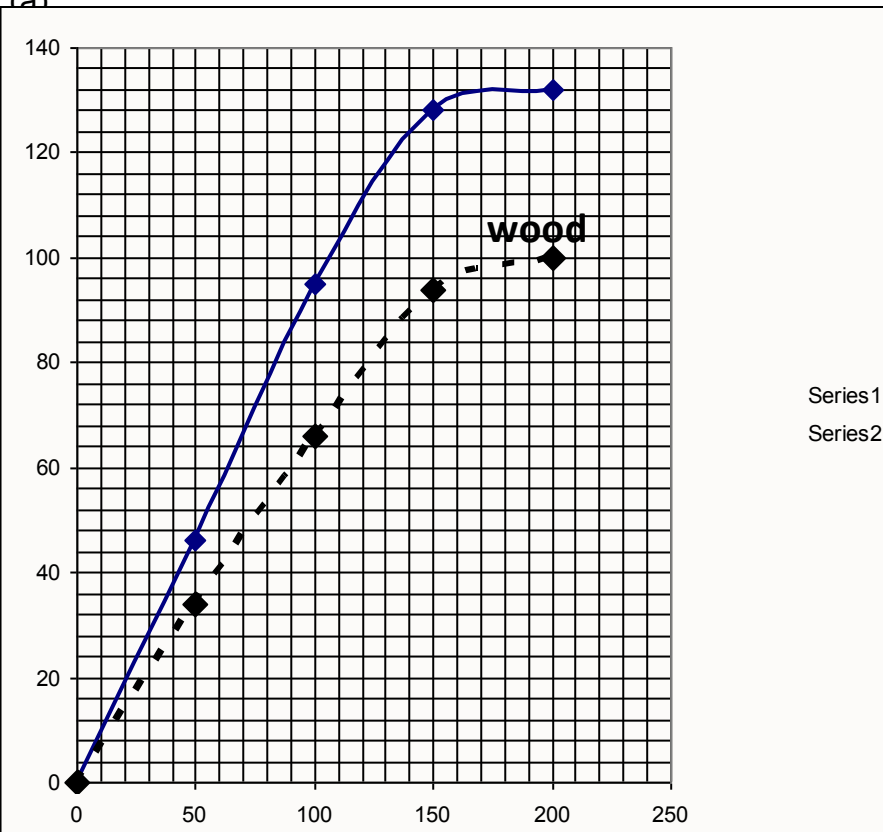
	All correct no mistakes = [2 marks]		
Eleven	(a) C - Meteorology	1 mark	
	(b) B - Climate	1 mark	
	(c) 	1 mark	
	(d) 1. High/anticyclone 2. Isobars 3. Warm front 4. Low / depression 2-3 correct = [1 mark] 4 correct = [2 marks]	2 marks	
	(e) (i) raining (ii) cold (iii) strong winds (iv) north-westerly winds 3-4 correct = [1 mark]	1 mark	
Twelve	(a) Beetle	1 mark	
	(b) Aphid, Spider, Ladybird, Woodlouse, Centipede, Slug Ladybird and woodlouse can be swapped All correct = [1 marks]	1 mark	
	(c) (i) Selected name matches organism labeled	1 mark	
	(ii) 	Possible labels –shell, foot, head, eye stalks, mouth, eye spots/tentacles	2 marks
		Possible labels – head, antennae, exopod, legs, abdomen/body, eyes	2 labels = [1 mark] 3-4 labels = [2marks]

		Possible labels – mouth, anus, clitellum/saddle, segments, setae/bristles,	
Thirteen	(a) nucleus		1 mark
	(b) electrons		1 mark
	(c) 6		1 mark
	(d) 12		1 mark
Fourteen	(a) (i) Black (ii) Green Both correct = [1 mark]		1 mark
	(b) Red objects absorb all colours of light, except red. Red objects reflect only red light. Since there is no red light, it will look black. Part explanation = [1 mark] Full explanation = [2 marks]		2 marks
Fifteen	(a) A and F Both right = [1 mark]		1 mark
	(b) A		1 mark
	(c) E		1 mark
	(d) Kinetic, sound and heat 2 correct = [1 mark] 3 correct = [2 marks]		2 marks
Sixteen	(a) The things that you can change in an experiment		1 mark
	(b) Investigating only one thing (variable) at a time and keeping all the other things the same		1 mark
	(c) The size of the beaker		1 mark
	(d) The balance used, brand of beaker, material that the beakers are made of or any other relevant answer. Any 2 variables named and correct = [1 mark]		1 mark
	(e) Balance		1 mark
	(f) grams / g		1 mark

(g) Bigger beakers have more mass = [1 mark]

1 mark

(a)



Seventeen

2 marks

Label (wood) or key given AND all points plotted correctly AND correctly drawn (curved) line

2 mistakes = [1 mark]

1 mistake = [2 marks]

(b) Ruler

1 mark

(c) Type of ball, size of ball, height ball is dropped from, person taking measurements, person dropping the ball, same area the experiment is done in.

Any 2 correct = [1 mark]

1 mark

(d) Y = 95 cm (can have 94-96)

Correct = [1 mark]

Don't have to include correct units

1 mark

	<p>(e) Because table/graph uses the word “average” / results are an average of tests done. Must use the word “average”.</p>	<p>1 mark</p>
	<p>(f) 132 = [1 mark]</p> <p>132 + explanation such as e.g. Height of bounce when the ball is dropped onto the concrete from 250cm would be expected to be 132 cm because the graph shows bounce height leveling off and reaching a plateau from 170 cm onwards) = [2 marks]</p>	<p>2 marks</p>
	<p>(g) (i) Balls bounce higher on concrete than they do on wood / balls bounce less on wood than they do on concrete. (ii) Balls bouncing on both surfaces (concrete and wood) show a similar pattern</p> <p>1 conclusion correct = [1 mark]</p>	<p>1 mark</p>