

Assessment Schedule 9B 2005

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

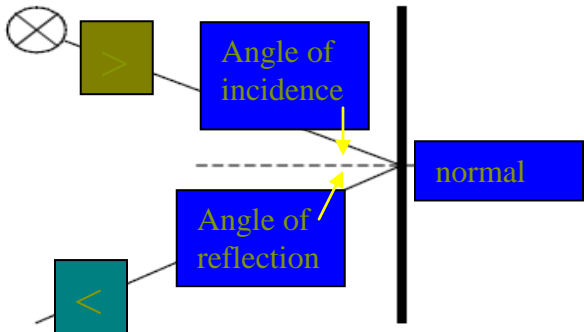
() means additional, not really required eg. Gauze (mat) – gauze would be sufficient

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

Question Number	Judgement	Marks
1 a	Diagram of a. test tube b. conical flask c. tripod d. gauze mat e. Bunsen burner f. Evaporating basin	5/6 correct = 2 4 correct = 1
b		3 symbols + 3 labels = 3 marks 4 or 5 = 2 marks 3 = 1 mark
2a	Does dissolving table salt affect the time it takes for salt solution to freeze	1
b	Mass/amount of salt	1
c	Time the salt solution takes to freeze	1
d	<ul style="list-style-type: none"> • Amount of distilled water • Freezer temperature • Size of container • Type of container • Position in freezer 	Any 3 correct = 2 2 correct = 1
e	1. measure salt (5g, 10g, 15g) 2. measure distilled water (say 50mL) 3. add salt to distilled water and mix until dissolved 4. place 50mL of salt solution into beaker, label each one with the amount of salt dissolved. 5. place beakers into freezer and start timing. Check every 15 minutes until frozen 6. record how long it took to freeze.	No gaps = 3 Minor gaps = 2 Significant gaps = 1

Question Number	Judgement	Marks
F	2422 3004 6036	All correct = 2 2 correct = 1
g	The higher the salt concentration / the greater the mass of dissolved salt, the longer it took for the solution to freeze or similar <i>but must include amount of salt and freezing time</i>	1
3a	earwig	1
b	Y	Both correct = 1
c	4	
d	Shield bug or W	1
e	Eight legs, no wings (Both needed)	1
4a	chloroplast nucleus cell membrane cell wall cytoplasm nucleus	5/6 correct = 2 2/3/4 = 1
b	A	1
c	Place a thin transparent piece of onion skin on a glass slide Put one drop of stain/water on onion skin Place cover slip carefully over onion skin so as not to get air bubbles	Max 3 marks - one for each detail left out
5a	i Test tube ii Conical flask	Both correct 1
		5 correct = 3 3/4 correct = 2 1/2 correct = 1
	beaker	
	Liquid → gas conical flask	
	Gas → liquid tubing	
b	distillation	1

Question Number	Judgement	Marks
C	Solution is heated, liquid (water) evaporates, salt is left behind Liquid turns to vapour and rises through tube As it passes through wet paper towel covered tube it cools and condenses. This is collected in test tube.	Max 3 1 mark for each correct point
6a	Colder temperature – particles in balloon move closer together taking up less space Warmer temperature – particles in balloon move further apart therefore taking up more space	Max 2 1 mark for each correct point
7a	petrol	1
b	Petrol removes all the inks OR All the inks are soluble in petrol not meths (NOT an answer about cleaning the wall well 😊)	1
c	(paper) chromatography	1
d	red	1
e	pupil X's matches ink from wall or pupil Y's does not match ink from wall or match the results with results of ink from wall	1
f	X	1
8a	White prism dispersion Spectrum rainbow refraction	6 correct = 3 4/5 correct = 2 3 correct = 1
b	red	1
c	orange (allow indigo f/o if b. was violet)	1
9a	Reflects light rays Concentrates or focuses or directs the light	1 mark each idea correct max 2
b	Because it reflects the most light (or absorbs least)	1

Question Number	Judgement	Marks											
10a/b		<p>Angle of incident and angle of reflection = 1</p> <p>Normal = 1</p> <p>Arrows = 1</p>											
c	30 degrees	1											
11	<p>When the bell is hit → the metal of the bell vibrates</p> <p>The vibrations in the metal → are passed on the air around the bell</p> <p>The vibrations travel → through the air</p> <p>The vibrations in the air → get to our ears and we will hear the bell ring</p>	<p>4 correct = 2</p> <p>2/3 correct = 1</p>											
12a	<table border="1" data-bbox="407 957 1169 1010"> <tr> <td>A</td> <td>E</td> <td></td> <td>D</td> <td>J</td> <td>K</td> <td></td> <td>B</td> <td>G</td> <td>F</td> <td>H</td> </tr> </table>	A	E		D	J	K		B	G	F	H	<p>8/9 = 2</p> <p>5/6/7 = 1</p>
A	E		D	J	K		B	G	F	H			
b	<p>Benedict's</p> <p>heat</p> <p>blue</p> <p>green/orange (accept orange-red OR brick red)</p>	<p>All correct = 2</p> <p>2/3 = 1</p>											
	<p>iodine</p> <p>blue / blue-black / purple / blue-purple / purple-black</p> <p>yellowish / yellow/orange / orange (NOT BROWN)</p> <p>iodine</p>	<p>All correct = 2</p> <p>2/3 = 1</p>											
c	<table border="1" data-bbox="407 1488 1169 1541"> <tr> <td></td> <td>A</td> <td>E</td> <td>D</td> <td>B</td> <td>C</td> </tr> </table>		A	E	D	B	C	<p>4/5 = 2</p> <p>2/3 = 1</p>					
	A	E	D	B	C								

Question Number	Judgement	Marks
13a	Solid = C Gas = B	Both correct 1
b	Oxygen / gas or any other named gas	1
c	B	1
d	Wind / flags blowing / waving arms / air resistance to objects / air can be weighed / balloons / tyres / air bubbles in water / air compressed in syringes etc	1
e	Burning needs oxygen/ glass jar contains oxygen. Oxygen is used up by the flame. Burning produces carbon dioxide, which extinguishes the flame.	Max 2 1 mark per point
14a	Build up of gases, difficult for heat to escape Caused by burning of fossil fuels / carbon dioxide identified / increased temperature on Earth / global warming Polar ice caps melt / climate changes / habitat changes	Max 3 1 per each line
15a	COLD front symbol drawn	1
b	High / high pressure system / anticyclone	1
c	Isobar / lines of equal pressure	1
16a	1 = winter 2 = spring 3 = summer 4 = autumn	All correct =1
17	Any 2 of the following 3 actions/expected results: <ul style="list-style-type: none"> Action: use plants, e.g., marram grass, ice-plant, toetoe. Result: stops erosion; holds the sand. Action: erect wind breaks using netting or low fences. Result: halts/limits the spread of the sand. Action: put organic matter on surface, e.g., seaweed, humus, or compost. Result: develops a heavier soil over the longer term. Any other acceptable answer. 	Max 4 1 mark for action 1 1 mark for result
	TOTAL	80