

Assessment Schedule 9C 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.

	Evidence	Marks
1a.	A	1 mark
b.	refracted/refraction and dispersion/dispersed (allow spread out)	1 mark
2a.	B	2/3 = 1 mark
b.	D	
c.	C	
3a.	C B D A	1 mark
b.	100 25	Both = 1 mark
4a.	85-90	1 mark
	solid	1 mark
b.	122-125	1 mark
c.	i. solid AND ii. liquid	1 mark
d.	liquid	1 mark
e.	Liquid Gas	Both = 1 mark
f.	Any 2 of: <ul style="list-style-type: none"> • Gaining energy/getting faster • Moving further apart/spreading out • Enough energy/fast enough to get away from each other/change state 	1 mark each, max = 2
5a.	Hg/mercury Cd/cadmium 47	2/3 = 1 mark
b.	27	1 mark
6a.	D	2/3 = 1 mark
b.	C	
c.	C	
7a.	Suns rays hit at an angle Suns rays/heat/energy spread over a larger area	1 mark each, max = 2
b.	i)Blows away thin layer of warm air that surrounds body OR increases the evaporation rate of the moisture on the skin	1 mark
	ii) – 7°C (unit needed)	1 mark
	iii) 2 or more correct of: 4°C & 40 km/h 0 °C & 20 km/h – 6 °C & 10 km/h - 8 °C & 5 km/h	1 mark
	iv) A reasonable comparison eg. <ul style="list-style-type: none"> • At 8°C the temperature drops 5°C, whereas at ̄8°C the temperature drops 9°C. • The effect of the wind chill factor is greater at ̄8°C. • There is a greater drop in the wind-chill equivalent temperature at the actual temperature of ̄8°C. 	1 mark

Q	Evidence	Marks														
8	<ul style="list-style-type: none"> • Check light source/lamp on/working • Check specimen on slide is thin (enough)/transparent • Objective lens clicked into place / not damaged • Diaphragm/thing under stage is adjusted correctly/doesn't block light passage (implied) 	3 correct = 2 marks 2 correct = 1 mark														
9a.	To see if light is needed for photosynthesis	1 mark														
b.	To see if the colour/wavelength of the light affects photosynthesis	1 mark														
c.	To see if carbon dioxide is needed for photosynthesis	1 mark														
10a.	Any 2 of <ul style="list-style-type: none"> • Large molars and/or premolars • Undeveloped canine • No front teeth on top jaw • Hard pad on top jaw • Large jaw • Diastema • Side looking eyes • Long nasal passage • Long elongated jaw 	1 mark each, max 2 marks														
b.	Any 2 of <ul style="list-style-type: none"> • Long pointed canines • Smaller molars • Jagged molars/premolars • Smaller jaw • More rounded/less elongate jaw • Short incisors 	1 mark each, max 2 marks														
11 a.	3 OR 7	1 mark														
b.	B															
12 a.	Y-axis labelled and an appropriate scale All points correctly plotted	1 mark 1 mark														
	<p style="text-align: center;">Size of ozone hole over Antarctica</p> <table border="1"> <caption>Data for Size of ozone hole over Antarctica</caption> <thead> <tr> <th>Month</th> <th>Size (million km²)</th> </tr> </thead> <tbody> <tr><td>July</td><td>0</td></tr> <tr><td>Aug</td><td>2</td></tr> <tr><td>Sept</td><td>10</td></tr> <tr><td>Oct</td><td>23</td></tr> <tr><td>Nov</td><td>10</td></tr> <tr><td>Dec</td><td>5</td></tr> </tbody> </table>	Month	Size (million km²)	July	0	Aug	2	Sept	10	Oct	23	Nov	10	Dec	5	
Month	Size (million km²)															
July	0															
Aug	2															
Sept	10															
Oct	23															
Nov	10															
Dec	5															
b.	Late July	1 mark														
c.	Some statement eg. The ozone layer increases in size until late September then decreases.	1 mark														
d.	<ul style="list-style-type: none"> • Line drawn on graph starts at July, and rises more steeply than graphed line. • The line reaches the same height and returns but with a less steep gradient (but doesn't need to return to 0 in December). 	1 mark 1 mark														
e.	Any 2 of: <ul style="list-style-type: none"> • Because the ozone hole moves over NZ • Because ozone filters out UV light • Because UV light can cause skin cancer / sunburn / cataracts • Any acceptable answer 	1 mark each, max 2 marks														
		40 marks														