

Assessment Schedule 9C 2008


/ 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 (a)	Spots	Zigzag lines
	A B F G H	C D E
(b)	Either Stripes/bands on head AND no stripes/bands on head A D F B C G H E <u>OR</u> Long antennae AND short antennae A C D F B E G H	1 mark
(c)	Supplies a Q to distinguish correctly between A and B eg stripes on head? / long antennae? / short antennae? AND supplies a Q that will split C,D and E into 2 groups based on striped head or antenna length. Completes right hand side of key to identify C, D and E	1 mark
	Eg <div style="text-align: center;"> <pre> graph TD Q1[Q: Long antennae] -- yes --> Q2[Q: bands on head] Q1 -- no --> I5[insect E] Q2 -- yes --> I4[insect D] Q2 -- no --> I3[insect C] </pre> </div> The position and wording of questions could be swapped around so marker will have to check if the key does in fact classify each successfully.	1 mark
Two (a)	3-4 correct of: Potatoes Meat Cabbage milk	1 mark

(b)	If 100 g contains 20 g of carbohydrate then 40 g contains $40/100 \times 20$ $40/100 \times 20 = 8$ g: mark for answer and some relevant working	1 mark
(c)	Food C PLUS a valid argument eg $B = 50 + (10 \times 2) + 6 = 76$ but $C = 42 \times 2 = 84$...("units of energy")	1 mark
(d)	5 correct of oesophagus liver stomach pancreas small intestine large intestine anus	1 mark
Three (a)	Pupil gets smaller : to limit amount of light into eye / prevent eye from damage	1 mark
(b)	Image is not clear on the retina (or equivalent idea implying fuzziness due to the scattering of light) / less light falling on the retina	1 mark
(c)	Would not be able to see : optic nerve carries message to the brain (or equivalent)	1 mark
Four (a)	Both correct: Nerves & blood vessels = C enamel = A	1 mark
(b)	Crushing/grinding/chewing : flattened / ridged	1 mark
(c)	All correct: 3 4 2 1	1 mark
Five (a)	Any 2 ideas – 1 mark; any 3 ideas – 2 marks <ul style="list-style-type: none"> • Has a title & includes magnification • Cells not coloured/shaded • Attention to detail eg cell wall drawn as double line / diagrams should show features • Field of view is NOT drawn • Large and clear diagram / diagrams large enough to show detail • Plant cells drawn in a more regular shape There may be other answers NOT – draw in pencil – who is to say these haven't been ☺	2 marks max.
(b)	2 correct answers needed (i) magnify (object) (ii) hold slide/specimen in place (on the stage) (iii) adjusts distance between slide and lens to focus on the slide (NOT just "to focus")	1 mark
(c)	Circles B + 2 reasons = 1 mark, circles B + 3 reasons = 2 marks <ul style="list-style-type: none"> • Has a (large) vacuole • Has chloroplast • Has cell wall References to overall cell shape are not accepted since this is a pretty unusual plant cell.	2 marks max.
Six (a)	D : pattern of separation/spodges/dots etc of ink D is same as sample	1 mark

(b)	Compare suspects pen with sample : look for match		1 mark
(c)	Look for attempt to combine the results of A&B into one result – see opposite		1 mark
(d)	Successfully explains that the “circle” of B would be under/combined with/hidden by the “bullet” of C – may draw on the diagram to explain		1 mark
Seven (a)	It is heated by the sunlight / warmed : evaporates / turns from liquid to gas/vapour (NOT steam) – NEEDS idea of heat energy being involved in the evaporation process		1 mark
(b)	It does not evaporate / it remains in the sea water / it is left in the hole		1 mark
(c)	The water (vapour) could not escape : water vapour condensed on the (cooler) plastic		1 mark
Eight (a)	All 3 correct: Vein capillary artery		1 mark
(b)	6 correct answers		1 mark
	I	F	
	C	H	
	J	B	
	E	A	
	D	G	
(c)	All correct: cell membrane cytoplasm nucleus		1 mark
(d)	oxygen / glucose / water / plasma	One or both correct	1 mark
(e)	respiration		
Nine (a)	Low density : unreactive BOTH ticked		1 mark
(b)	Nucleus	Two or three correct	1 mark
(c)	6		
(d)	12		
(e)	5 or more correct		1 mark
	VI	III	
	V	IV	
	VIII	I	
	II	VII	
(f)	2 x Na, 1 x C, 3 x O MgSO ₄		1 mark

Ten (a)	Metal / rod : expands : bar pushes the pointer (not particles/atoms expand or "it" expands)		1 mark
(b)	Correct arrow (←)	Both correct	1 mark
(c)	Top left diagram of the 4 (particles same size but more spaced out)		
(d)	A correct answer involving the mention of expansion/contraction as appropriate <u>AND</u> a consequence Eg Telephone wires would contract when it is colder : might snap if they had been put up without any slack / might pull the poles over! The lid expands more than the glass : so it's easier to get off. Tracks can expand in hot weather : without buckling		1 mark
(e)	Any 2 correct links made Diffusion happens..... gas particles move around more freely than... Solids are usually.... solid particles are closely packed / the particles are closely packed together... Liquid have a fixed...The particles move around but stay close ... A gas condenses when.... The particles lose energy and move...		1 mark
Eleven (a)	Pluck strings harder / pull strings further	2 correct	1 mark
(b)	The sound has a higher pitch		
(c)	D		
(d)	Flash first : light travels faster than sound		1 mark
			40 marks