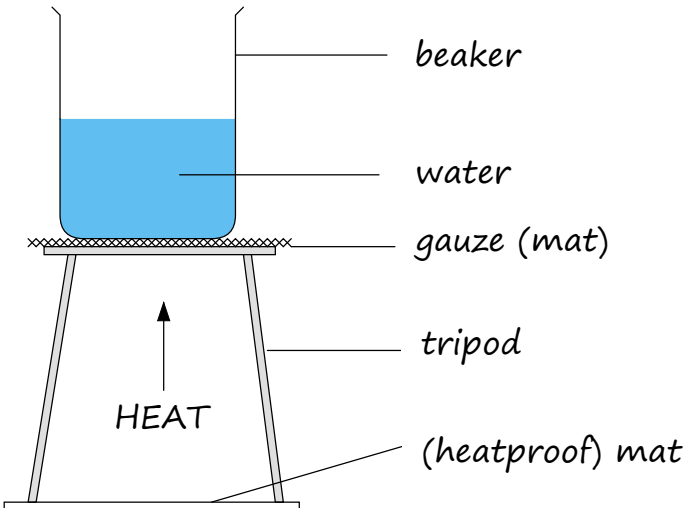
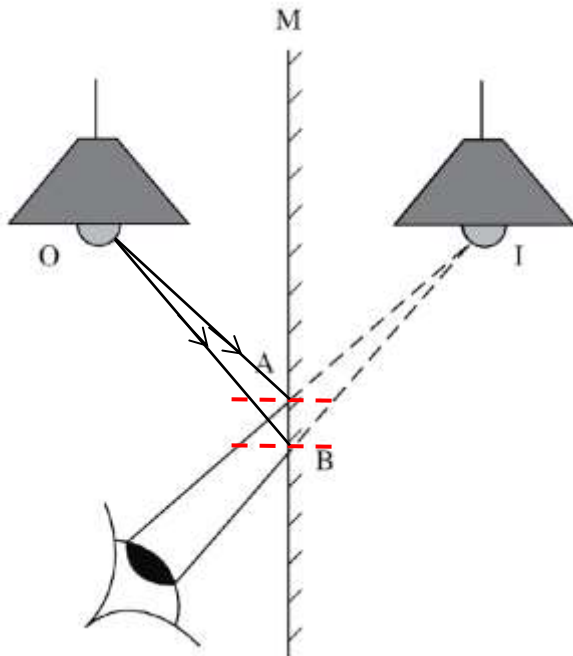


FINAL SCHEDULE

9B 2012

/ 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)(i)	Any 2 from hair tied back / wearing safety glasses / pointing tube at an angle / using a heatproof mat / wearing lab apron (coat or some idea of protective clothing)	½ + ½
(ii)	2 from sitting down to do experiment / hair loose / no safety glasses / no mat / not watching Bunsen etc – must be different ideas to (a)(i)	½ + ½
(b)	 <p>½ for 2D diagram, correct symbols for beaker tripod, gauze and Bunsen (mat optional)</p> <p>½ for any 4 correct labels; no need to label arrow as Bunsen!</p>	½ + ½
Two (a)(i)	16.5 cm ± 0.2 : cm	½ + ½
(ii)	Line up pencil with zero mark Use the ½ cm scale instead of cm scale / use (the) more accurate scale	½ + ½
(b)(i)	51	½
(ii)	82	½
Three (a)	eyes on side of head : structural, drumming : behavioral	½ + ½
(b)	Suitable reason e.g. to see all around / front and back / good peripheral vision (not just see well) : reason why (linked to greater) survival (chances) of the rabbit e.g. to see predators or equivalent Drum to warn other rabbits of danger : reason why (linked to greater) survival (chances) of the rabbit e.g. so other rabbits know to run away	½ + ½
(c)(i)	A : D	½ + ½

(ii)	X = nucleus, Y = cell membrane	$\frac{1}{2} + \frac{1}{2}$
(iii)	Any one part AND appropriate correct function chloroplast ; make food/starch / (carry out) photosynthesis or equivalent cell wall : support / shape / protect??? large vacuole : stores..... / contain water / contains sap	$\frac{1}{2} + \frac{1}{2}$
Four	1 – killer whale 2 – common dolphin 3 – bottlenose dolphin 4 – minke whale	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$
Five (a)	All 5 points correct = [1] mark, but just 4 points correct [$\frac{1}{2}$ mark] : smooth line [$\frac{1}{2}$ mark]	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2}$
(b)	Suitable value as read from plotted data ± 5 g	$\frac{1}{2}$
(c)	As the temperature increases : the solubility of the fertiliser increases	$\frac{1}{2} + \frac{1}{2}$
(d)	Method: stir / warmer temperature Explanation : more collisions / second etc more heat energy	$\frac{1}{2} + \frac{1}{2}$
Six (a)	 <p>2 normals 2 incident rays correct direction arrows</p>	$\frac{1}{2}$ mark $\frac{1}{2}$ mark $\frac{1}{2}$ mark
(b)	At X – black / no light [$\frac{1}{2}$] Explanation: Only red light passes through red filter [$\frac{1}{2}$] but since only blue can pass through a blue filter, no light passes through and so it is black at X. [$\frac{1}{2}$]	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2}$
(c) (i)	prism	$\frac{1}{2}$ mark

(ii)	X – red, Y – green, Z – violet (all 3 correct)	½ mark
Seven (a)	Any valid reason(s) e.g. strong, able to be bent/shaped etc	1 mark
(b)	Any valid reason(s) e.g. absorbs shock, grip, hard wearing, not noisy on hard surface, won't SCRATCH floor etc NOT slippy, low friction, bouncy, soft or doesn't leave marks	1 mark
Eight (a)	15	½ mark
(b)	(Add) protons + neutrons	½ mark
(c)	(2), 8, 5 arrangement drawn	½ mark
(d)	C (2)different atoms/elements/particles : chemically joined/combined	½ mark 1 mark
Nine (a)	(i) C (ii) D (iii) A (iv) B ; 2 correct = ½ ; 4 correct = 1	½ + ½
(b)	Dolphins call – B We can hear – A : C (either order) ½ each There is no sound in space – D We can feel vibrations – A	½ + ½ + ½ + ½
(c)(i)	The flash	½ mark
(ii)	Light travels faster than sound	½ mark
Ten (a)	14	½ mark
(b)	<u>Carbon fibre</u> layers are used to make motor racing helmets rigid and light. It was important to mention the carbon fibres.	½ mark
(c)	Epoxy resin bonds the layers together	½ mark
(d)	Polyethylene layers provide protection from impact.	½ mark
(e)	Oil, carbon and brake dust particles	½ mark
(f)	So that the driver is unaffected by the <u>glare</u> of the sun. It was important to mention the <i>glare</i> of the sun (or any other appropriate wording).	½ mark
Eleven (a)	A producer / a plant	½ mark

(b)	<p style="text-align: center;">½ mark for each correct arrow</p>	½ + ½
(c)(i)	decrease	½ mark
(ii)	Dragon fly larvae would now need to eat more copepods	½ mark
(d)	A	½ mark
Twelve (a)	<p style="text-align: center;">2 correct = ½ , all 3 correct = ½ + ½ Could add a line from "rivers" to "clouds"</p>	½ + ½
(b)	Description of water evaporating from named body of water Description of water condensing in clouds Description of water returning to Earth as precipitation/rain, hail, snow etc	1 mark 1 mark 1 mark
		40