

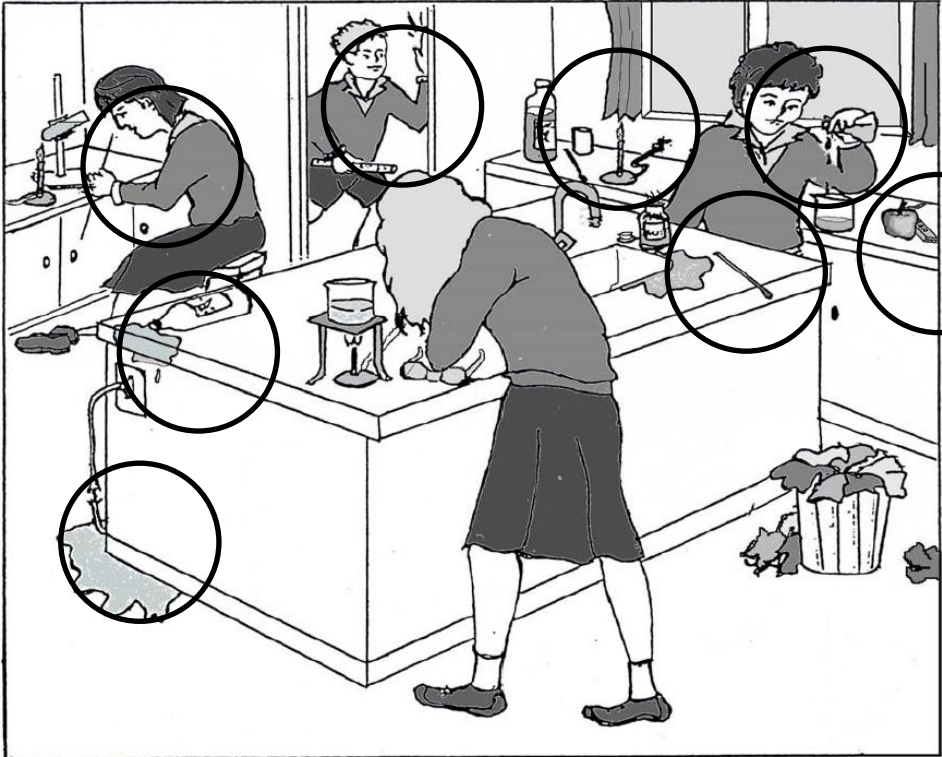
FINAL

Paper A 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)	<p>Refer to the diagram for examples – there are many more</p> 	1 mark for 2 correctly circled
(b)(i)	<p>i) e.g A- The test tube is pointing towards the student's eye and the heated fluid could squirt into her eye. B- There is not heat mat under the Bunsen burner. Any hot liquid would fall on the heat mat and also heat mat protects the surface of work bench/table. C- Shoes placed near working area. Student could trip on these and fall. / student not wearing shoes in lab and could step on broken glass etc.</p>	1 mark
(ii)	<p>e.g Point the test the test tube away from the face. Place a heat proof mat under the Bunsen burner. Place the shoes on the shoe rack, away from the working area.</p>	1 mark
Two (a)	<p>Size of cans Length of string Tightness of string</p>	2 correct - 1 mark
(b)	1	1 mark

(c)	the best had large cans and short and tight strings	1 mark
Three (a)	i) 40°C ii) 25mL (1 mark if both correct answers without units)	1 mark 1 mark
(b)	4.5 cm : 45 mm	1 mark Both correct
(c)	i) Green = 10. Purple = 75. Yellow = 50. ii) colour iii) D	1 mark 1 mark 1 mark
Four (a)	A - Steam. B - water. C - ice	1 mark
(b)	A - Liquid to gas. B - Liquid to solid.	1 mark each
(c)	move slower. move closer together.	1 mark
Five (a)	i) sugar is the solute water is the solvent ii) boil the solution until all the water has evaporated / leave in warm place)	1 mark 1 mark
(b)	Residue: mud/soil Filtrate: water	1 mark
(c)	I would use a magnet It works because a magnet attracts iron filings / iron is magnetic	1 mark 1 mark
(d)	Decanting and distillation	1 mark
Six (a)	(i) solar cells -> sunlight Petrol generator -> chemicals	1 mark
	(ii) It needs light to work. (iii) For the turbines to move, it needs wind /so no electricity is generated without the movement of air particles (wind).	1 mark 1 mark
(b)	(i) chemical changes to electrical (ii) electrical changes to light	1 mark each
Seven (a)	<ul style="list-style-type: none"> Reflects with roughly correct angle of reflection. Direction shown using an arrowhead. Or 1 mark if both correct angles but no arrows	1 mark 1 mark
(b)	Reflects	1 mark
(c)	(i) Plots correctly	1 mark
	(ii) 11	1 mark

	(iii) Expected value: 16 Reason: it follows the trend line/ is a point that corresponds to 60 cm/height increases by 2 when distance increases by 10	1 mark
	(iv) increases	1 mark
Eight (a)	Plankton → herrings → salmon → killer whales	1 mark
(b)	Consumer: killer whales/ herrings/ salmon/sea birds Herbivore: herrings Prey: herrings/salmon/other whales/seals	1 mark each
Nine	A – 4 B – 1 C – 2 D – 3	2 marks – all 1 mark – 2 correct
		40 marks