
SCIENCE

Paper 2

FINAL MARK SCHEME

Maximum Mark: 50

0846/02

October 2015

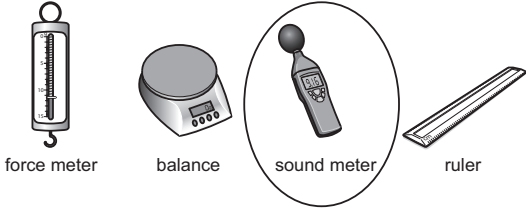
IMPORTANT NOTICE

Mark Schemes have been issued on the basis of **one** copy per Assistant Examiner and two copies per Team Leader.

This document consists of **10** printed pages.

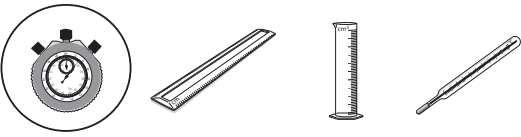
Question number		1	CPS00314
Part	Mark	Answer	Further Information
	3	<p>A food chain starts with a producer.</p> <p>Any animal eaten by another animal is their prey.</p> <p>An animal that eats something else in the food chain is a consumer.</p> <p>An animal that eats another animal is a predator.</p>	<p>4 correct = 3 marks 2 or 3 correct = 2 marks 1 correct = 1 mark</p> <p>Accept consumer</p>
Total	3		

Question number		2	CPS00314
Part	Mark	Answer	Further Information
(a)	1	300(°C)	
(b)	1	D	
(c)	1	changes (from a liquid) to a gas / evaporates	<p>Accept changes to vapour</p> <p>Do not accept changes to steam / water vapour</p>
(d)	1	100(°C)	
Total	4		

Question number		3	CPS00405	
Part	Mark	Answer		Further Information
(a)	1	 <p>force meter balance sound meter ruler</p>		<p>more than one answer circled = 0 marks</p> <p>Accept any indication of the correct answer</p>
(b)	1	pluck / pick / move / vibrate (the string(s))		<p>Accept strum / pull</p> <p>Ignore play / tighten / loosen / hit / strike / use / bang (the guitar / string(s))</p>
(c)	1	<p>Play the violins harder. <input checked="" type="checkbox"/></p> <p>Play the violins softer. <input type="checkbox"/></p> <p>Have more violins playing. <input checked="" type="checkbox"/></p> <p>Have less violins playing. <input type="checkbox"/></p>		<p>both needed for 1 mark</p> <p>more than two ticks = 0 marks</p>
Total	3			

Question number		4	CPS00510	
Part	Mark	Answer		Further Information
	3	<p>A = Pinnate-leaved Ragwort</p> <p>B = Alpine Aster</p> <p>C = Cowberry</p> <p>D = Fairy Thimble Bellflower</p> <p>E = Common Mezereon</p>		<p>Accept partial names, e.g. Bellflower</p> <p>5 correct = 3 marks</p> <p>3 or 4 correct = 2 marks</p> <p>1 or 2 correct = 1 mark</p>
Total	3			

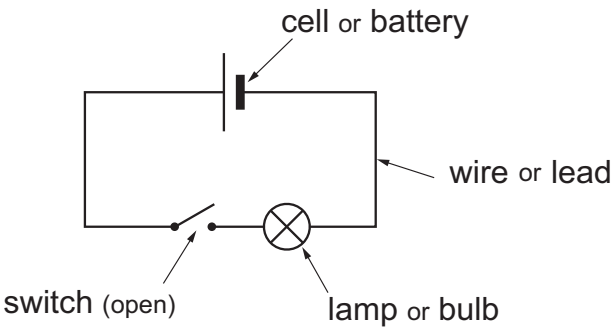
Question number		5	CPS00256
Part	Mark	Answer	Further Information
(a)	1	evaporation filtration magnetic attraction sieving	Accept any indication of the correct answer more than 1 answer circled = 0 marks
(b)	1	evaporation filtration magnetic attraction sieving	Accept any indication of the correct answer more than 1 answer circled = 0 marks
(c)	1	evaporation filtration magnetic attraction sieving	Accept any indication of the correct answer more than 1 answer circled = 0 marks
Total	3		

Question number	6	CPS00238	
Part	Mark	Answer	Further Information
(a)	1		<p>more than one answer circled = 0 marks</p> <p>Accept any indication of the correct answer</p>
(b)	1	<p style="text-align: center;">beats per minute</p> <p style="text-align: center;">beats per second</p> <p style="text-align: center;">minutes per beat</p> <p style="text-align: center;">seconds per beat</p>	<p>more than one answer circled = 0 marks</p> <p>Accept any indication of the correct answer</p>
(c)	1	Pierre thinks his pulse rate will increase .	Accept any indication of the correct answer but response on answer line takes precedence
(d)	1	<p style="text-align: center;">conclusion</p> <p style="text-align: center;">method</p> <p style="text-align: center;">prediction</p> <p style="text-align: center;">result</p>	<p>more than one answer circled = 0 marks</p> <p>Accept any indication of the correct answer</p>
(e)	1	to make it more reliable	<p>Accept (idea of) checking results / to see if they are the same</p> <p>Ignore to get the average / to get the mean / to get precise results</p> <p>Do not accept to make the results more accurate / to make it a fair test</p>
Total	5		

Question number		7	CPS00265_A
Part	Mark	Answer	Further Information
(a)	1	evaporation	Accept evaporate Ignore heating Do not accept boiling
(b)	1	condensation	Accept condense / condensing
(c)	1	freezing	Accept freeze Ignore solidifying
(d)	1	(idea that) volume of water decreases / all the water disappears / white solid / white crystals / steam / water vapour / gas produced	Accept bubbles / salt Ignore boiling
Total	4		

Question number		8	CPS00325
Part	Mark	Answer	Further Information
	1	Lily's mass is greatest when her hands are up. <input type="checkbox"/> Lily's mass is less when her hands are up. <input type="checkbox"/> Lily's mass is the same when her hands are up or down. <input checked="" type="checkbox"/>	more than one answer ticked = 0 marks Accept any indication of the correct answer
Total	1		

Question number		9	CPS00311	
Part	Mark	Answer		Further Information
(a)	1	attract insects / attract bees		Accept use insects for pollination
(b)	1	anther	carpel ovary	more than one answer circled = 0 marks Accept any indication of the correct answer
(c)	1	nectary petal sepal	stigma	more than one answer circled = 0 marks Accept any indication of the correct answer
Total	3			

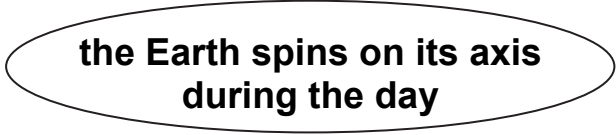
Question number		10	CPS00320	
Part	Mark	Answer		Further Information
(a)	3			4 correct = 3 marks 2 or 3 correct = 2 marks 1 correct = 1 mark Accept connector for wire Ignore circuit for wire Accept (negative or positive) terminal of cell or battery for cell or battery
(b)	1	(idea of) circuit is broken / not complete / not joined up		Accept there is a gap / there is a hole Do not accept the switch is on / off
(c)	1	cell or battery the wrong way round / negative connected to negative / positive connected to positive / positive not connected to negative		Accept terminals wrong way round Accept cell or battery is on wrong side or in wrong place Do not accept the switch is on / off
Total	5			

Question number		11	CPS00504
Part	Mark	Answer	Further Information
(a)	1	ruler	Accept measuring tape / tape measure / tape ruler Ignore scale on its own or measuring scale
(b)	1	A C D E	more than one answer circled = 0 marks Accept any indication of the correct answer
(c)	1	C is the shortest / shorter	answer must be comparative e.g. C is short compared to A B and D Do not accept C is short
Total	3		

Question number		12	CPS00092
Part	Mark	Answer	Further Information
	3	<p>Any three from:</p> <p>wide feet / padded feet</p> <p>hump</p> <p>eyelids / long eye lashes / eye brows</p> <p>covered nostrils / nostrils that close</p> <p>lips that close / thick lips</p> <p>short hair / thick hair / hair for camouflage</p> <p>long legs</p>	<p>just 'feet' is insufficient</p> <p>Accept bump (on back)</p> <p>just 'nostrils' is insufficient</p> <p>just 'lips' is insufficient</p> <p>just 'hair' is insufficient</p> <p>Ignore large legs</p> <p>Accept as an extra marking point: can go a long time without drinking</p>
Total	3		

Question number		13	CPS00410	
Part	Mark	Answer		Further Information
	1	Edwin Hubble	<input type="checkbox"/>	more than one answer ticked = 0 marks Accept any indication of the correct answer
		Galileo Galilei	<input checked="" type="checkbox"/>	
		Isaac Newton	<input type="checkbox"/>	
		Leonardo da Vinci	<input type="checkbox"/>	
Total	1			

Question number		14	CPS00246	
Part	Mark	Answer		Further Information
(a)	1	measuring cylinder		Accept cylinder Do not accept measuring tube / beaker
(b)	1	35 (cm ³)		unit not needed
(c)	1	<div style="text-align: center;"> balance beaker ruler thermometer </div>		more than one answer circled = 0 marks Accept any indication of the correct answer
(d)	1	<div style="text-align: center;"> decreases increases stays the same </div>		more than one answer circled = 0 marks Accept any indication of the correct answer
Total	4			

Question number		15	CPS00453
Part	Mark	Answer	Further Information
(a)	2	light (from the Sun) is blocked (by the pointer) (idea that) the shadow (edge) is on the 14:00 (time scale)	each correct answer = 1 mark Accept light is stopped / pointer is opaque Accept shadow falls on the 14:00
(b)	1	the Sun moves during the day  the Sun spins on its axis during the day	more than one answer circled = 0 marks Accept any indication of the correct answer
(c)	1	no Sun at night / no light at night / it is only light in the day / the Sun is only seen in the day	Accept (idea that) Sun is not always visible / Sun is not there at night
Total	4		

Question number		16	CPS00124
Part	Mark	Answer	Further Information
	1	(idea of) easier to see trends / (idea of) easier to spot anomalous results	Accept (idea of) the results cannot get muddled up / results are organised / results cannot get lost / results are easy to understand / so she does not get confused Ignore to record her results properly Ignore to not forget her results Do not accept to make it reliable / fair test
Total	1		