

Cambridge Primary Checkpoint

SCIENCE**0846/01**

Paper 1

April 2020

MARK SCHEME

Maximum Mark: 50

Published

This mark scheme is published as an aid to teachers and learners, to indicate the requirements of the examination. However, we have not been able to adjust it to reflect the full range of answers that would have been seen as a part of the normal moderation and marking process, and it does not necessarily contain all the possible alternatives that might have arisen.

Cambridge will not enter into discussions about the mark scheme.

General guidelines on marking

Many descriptive answers can be expressed in a variety of ways. Professional judgement can be used in these cases, providing it matches the marking points and further information in the mark scheme.

Answers may have words spelt incorrectly. Credit is normally given for phonetically correct answers, unless the word has a scientifically different meaning. For example, where the answer should be antennae, credit will be given for antenna but not for anthen (too close to anther).

Only the science is being assessed, so answers do not need to be grammatically correct.

Unless specified all marking points are independent.

Annotations and abbreviations

/OR	alternate responses for the same marking point
() brackets	the words or units in brackets do not need to be stated, for example, (recycles or releases or provides) minerals = minerals scores the mark
Accept	an acceptable response
Do not accept	indicates an incorrect response that would contradict another otherwise correct alternative
Ignore	indicates an irrelevant answer that is not creditworthy. Full marks can still be achieved even with answers that are ignored.
Note	provides extra information when necessary

Question	Answer	Marks	Further Information
1	kidney brain	2	each correct answer = 1 mark

Question	Answer		Marks	Further Information
2			3	each correct answer = 1 mark Accept picking out with tweezers or forceps Accept evaporation
	mixture	method of separating		
	copper powder and steel powder	magnetic attraction / magnet		
	copper powder and zinc lumps	sieving		
	sand and water	filtration		

Question	Answer	Marks	Further Information
3	He uses a force to push air into the balloon. The balloon changes shape .	2	each correct sentence = 1 mark Accept He uses a push to force air into the balloon.

Question	Answer	Marks	Further Information
4	<div> <div>material</div> <div>description</div> <div> <div>black solid</div> <div>petrol</div> <div>gold</div> <div>nitrogen</div> <div>polythene plastic</div> <div>water</div> <div>flammable liquid</div> <div>melting point of 0°C</div> <div>colourless gas</div> <div>shiny solid</div> <div>attracted to a magnet</div> <div>flexible and colourless solid</div> </div> </div>	5	<p>each correct link = 1 mark</p> <p>if there are two lines from the same material to a different description = 0 marks for that material</p>

Question	Answer	Marks	Further Information
5	<p>Hoop A is a model of the orbit.</p> <p>Ball B is a model of the Earth.</p> <p>Ball C is a model of the Sun.</p>	2	<p>three correct = 2 marks two correct = 1 mark one correct = 0 marks</p> <p>Accept Moon for ball B if ball C is the Earth Accept Earth for ball C if ball B is the moon</p>

Question	Answer	Marks	Further Information
6(a)	plant A	1	
6(b)	plant C	1	

Question	Answer			Marks	Further Information
7(a)	statement	true	false	1	both correct = 1 mark
	sound travels at the same speed through all materials		✓		
	volume of sound is measured in decibels	✓			
7(b)	statement	true	false	1	both correct = 1 mark
	the strings of a violin vibrate to make sound	✓			
	hitting a drum harder makes a softer sound		✓		

Question	Answer	Marks	Further Information
8(a)	ruler/measuring tape	1	
8(b)	balance/scales	1	Do not accept weighing scales
8(c)	any one from width volume hardness/softness strength	1	Accept density Accept diameter

Question	Answer	Marks	Further Information
9(a)	Animal shadows are made when light from a source is blocked .	1	Accept stopped / obstructed
9(b)	This is because the material they are made from is opaque .	1	
9(c)	This is because the eye of the animal shape is transparent .	1	Accept see-through

Question	Answer	Marks	Further Information
10	feeding predator producer	3	each correct answer = 1 mark

Question	Answer	Marks	Further Information
11	1. kilogram/kg 2. newton/N 3. newton/N 4. gravity	3	Accept gram/g Do not accept n Do not accept n four correct = 3 marks two or three correct = 2 marks one correct = 1 mark

Question	Answer	Marks	Further Information
12(a)	any one from move into the shell have slime burrow into the ground find a cool area/move into shade/away from sunlight	1	Accept live in water
12(b)	tentacles/feelers/eyes (on stalks)/antennae/senses/taste/smell	1	

Question	Answer	Marks	Further Information																
13(a)	<table border="1"> <tr> <td>force</td><td colspan="3">time in s</td></tr> <tr> <td>(gentle)</td><td>1.0</td><td>1.1</td><td>1.1</td></tr> <tr> <td>(medium)</td><td>1.0</td><td>1.1</td><td>1.2</td></tr> <tr> <td>(hard)</td><td>1.0</td><td>1.1</td><td>1.2</td></tr> </table>	force	time in s			(gentle)	1.0	1.1	1.1	(medium)	1.0	1.1	1.2	(hard)	1.0	1.1	1.2	2	<p>correct headings with unit = 1 mark</p> <p>all results correct = 1 mark</p> <p>Accept reverse order</p> <p>Units should not appear in the table, only in the heading. Ignore units not in the heading.</p>
force	time in s																		
(gentle)	1.0	1.1	1.1																
(medium)	1.0	1.1	1.2																
(hard)	1.0	1.1	1.2																
13(b)	the time will increase	1	Accept any time greater than 1.2																
13(c)	<p>Measure the height of Carlos. <input type="checkbox"/></p> <p>Measure the mass of Ahmed. <input type="checkbox"/></p> <p>Use a forcemeter to measure the force applied. <input checked="" type="checkbox"/></p> <p>Use more hard pushes and less gentle pushes. <input type="checkbox"/></p>	1																	

Question	Answer	Marks	Further Information
14(a)	<p>A is a battery and B is a lamp</p> <p>A is a cell and B is a switch</p> <p>A is a switch and B is a lamp</p> <p>A is a cell and B is a lamp</p> <p>A is a battery and B is a switch</p>	1	more than one answer circled = 0 marks
14(b)	<p>yes</p> <p>lamp lights up / lamp is on / circuit is complete</p>	1	both correct = 1 mark
14(c)	insulator / so they do not get an (electric) shock	1	Ignore for protection
14(d)	(good) conductor	1	

Question	Answer	Marks	Further Information
15(a)	turns into a gas / changes from a liquid to a vapour	1	Accept it evaporates Do not accept it forms steam
15(b)	7 (°C) boiling point of water is 100 (°C)	2	Accept 107 – 100 = 7 each correct answer = 1 mark, wherever written in the answer space

Question	Answer	Marks	Further Information
16(a)	temperature / rate of stirring / volume of water / size of sugar cube / mass of sugar cube / type of sugar / length of stirring	1	Accept size or shape of beaker
16(b)	25 32	2	each correct time = 1 mark
16(c)	No because the average value is less than 55	1	Accept no because only one value was at 55 / no because two values were well below 55 Accept yes because the other two were not correct
16(d)	to check results / evaluate results / to make results more reliable / to be able to work out an average	1	

Question	Answer	Marks	Further Information
17	add a book <input checked="" type="checkbox"/>	2	each correct tick = 1 mark three ticks, two correct = 1 mark three ticks, one correct = 0 marks four or more ticks = 0 marks
	remove a book <input type="checkbox"/>		
	make the light brighter <input type="checkbox"/>		
	make the light dimmer <input type="checkbox"/>		
	move the light away from the books <input checked="" type="checkbox"/>		
	move the light above the books <input type="checkbox"/>		

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