



Cambridge International Examinations
Cambridge Primary Checkpoint

SCIENCE

0846/01

Paper 1

April 2016

MARK SCHEME

Maximum Mark: 50

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 **12** printed pages.



Question number			1	CPS00395																																				
Part	CF	Skill	Mark	Answer				Further Information																																
	4Cs1	K	3	<table border="1"> <thead> <tr> <th>material</th> <th>solid</th> <th>liquid</th> <th>gas</th> </tr> </thead> <tbody> <tr> <td>water</td> <td></td> <td>(✓)</td> <td></td> </tr> <tr> <td>iron</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>mercury</td> <td></td> <td>✓</td> <td></td> </tr> <tr> <td>oxygen</td> <td></td> <td></td> <td>✓</td> </tr> <tr> <td>carbon dioxide</td> <td></td> <td></td> <td>✓</td> </tr> <tr> <td>copper</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>salt</td> <td>✓</td> <td></td> <td></td> </tr> </tbody> </table>				material	solid	liquid	gas	water		(✓)		iron	✓			mercury		✓		oxygen			✓	carbon dioxide			✓	copper	✓			salt	✓			<p>all six correct = 3 marks</p> <p>four or five correct = 2 marks</p> <p>three correct = 1 mark</p> <p>one or two correct = 0 marks</p> <p>if more than one box is ticked in a row = 0 marks for that material</p>
material	solid	liquid	gas																																					
water		(✓)																																						
iron	✓																																							
mercury		✓																																						
oxygen			✓																																					
carbon dioxide			✓																																					
copper	✓																																							
salt	✓																																							
Total			3																																					

Question number			2	CPS00339				
Part	CF	Skill	Mark	Answer				Further Information
(a)	6Be1	K	1	<p>littering the forest</p> <p>making paths through the forest</p> <p>protecting the species in the forest</p> <p>removing the fruits from the forest</p>				more than one circled = 0 marks
(b)	6Be1	K	2					<p>three correct = 2 marks</p> <p>one or two correct = 1 mark</p> <p>if more than one line from a box = 0 marks for that box</p>
Total			3					

Question number			3	CPS00497	
Part	CF	Skill	Mark	Answer	Further Information
(a)	5PI2	A	1	move his hands closer to the screen / move his hands further from the screen / move his hands closer to the light source / move his hands further from the light source	
(b)	5PI5	A	1	Hassan makes a shadow puppet because his hands are opaque .	more than one word = 0 marks
Total			2		

Question number			4	CPS00531	
Part	CF	Skill	Mark	Answer	Further Information
	6Bh2	A	1	kidney	
Total			1		

Question number		5	CPS00294		
Part	CF	Skill	Mark	Answer	Further Information
(a)	6Ep7 6Cc3	E	2	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px; margin: 2px;">balance</div> <div style="border: 1px solid black; padding: 2px; margin: 2px;">10cm³ of water</div> <div style="border: 1px solid black; padding: 2px; margin: 2px;">measuring cylinder</div> <div style="border: 1px solid black; padding: 2px; margin: 2px;">temperature of water</div> <div style="border: 1px solid black; padding: 2px; margin: 2px;">stop watch</div> <div style="border: 1px solid black; padding: 2px; margin: 2px;">1.0g of solid</div> <div style="border: 1px solid black; padding: 2px; margin: 2px;">thermometer</div> <div style="border: 1px solid black; padding: 2px; margin: 2px;">1 minute</div> </div>	<p>four correct = 2 marks</p> <p>two or three correct = 1 mark</p> <p>one correct = 0 marks</p> <p>if more than one line from a box = 0 marks for that box</p>
(b)	6Cc3	A	2	<p>A / A is the colourless solution</p> <p>B / blue solution</p>	<p>do not accept colourless solution for A</p> <p>each correct solid = 1 mark</p> <p>if three given with A and B = 1 mark</p> <p>if three given with either A or B given = 0 marks e.g. A C and D</p> <p>if all four given = 0 marks</p>
(c)	6Cc3	A	1	D / cloudy mixture	more than one letter = 0 marks
Total			5		

Question number			6	CPS00415																	
Part	CF	Skill	Mark	Answer		Further Information															
	4Ps2	K	2		<table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%; text-align: center;">true</th> <th style="width: 20%; text-align: center;">false</th> </tr> </thead> <tbody> <tr> <td>Sound can travel through air.</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Sound travels as vibrations.</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Sound travels at the same speed in all materials.</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>We hear sounds when vibrating air hits our eardrums.</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>		true	false	Sound can travel through air.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sound travels as vibrations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sound travels at the same speed in all materials.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	We hear sounds when vibrating air hits our eardrums.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	four correct = 2 marks two or three correct = 1 mark one correct = 0 marks if both boxes ticked in a statement = 0 marks for that statement
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Total			2																		

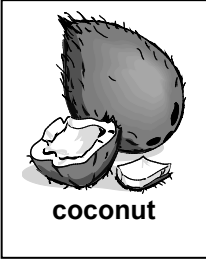
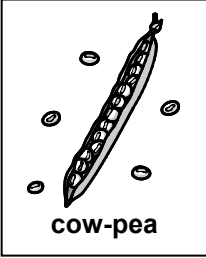
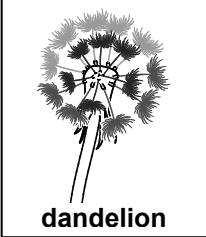
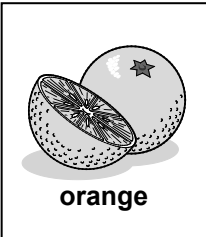
Question number			7	CPS00135		
Part	CF	Skill	Mark	Answer		Further Information
	6Bh3	K	3	Clue 1: heart Clue 2: brain Clue 3: lung / lungs Clue 4: kidney / kidneys Clue 5: stomach		five correct = 3 marks three or four correct = 2 marks two correct = 1 mark one correct = 0 marks
Total			3			

Question number			8	CPS00532	
Part	CF	Skill	Mark	Answer	Further Information
(a)	4Bh2	A	1	All the skeletons protect the organs inside the body. true All the skeletons grow as the animals grow. true	both answers true = 1 mark
(b)	4Bh3	A	1	Two of the skeletons are human. false Only humans have muscles attached to the bones. false	both answers false = 1 mark
Total			2		

Question number			9	CPS00032	
Part	CF	Skill	Mark	Answer	Further Information
(a)	4Pm4	K	2	Like poles of two magnets attract. <input type="checkbox"/> Magnetism is a force. <input checked="" type="checkbox"/> Most magnets are made of iron. <input checked="" type="checkbox"/> Most metals are attracted towards a magnet. <input type="checkbox"/>	one mark for each correct tick three ticks, two correct = 1 mark three ticks, one correct = 0 marks four ticks = 0 marks
(b)	4Eo5 4Pm4	E	2	A (idea of) held the most pins / held more pins	one mark for each correct answer more than one letter = 0 marks
(c)	4Ep4 4Pm4	E	1	(idea of) same (type of) pins	
Total			5		

Question number		10		CPS00485		
Part	CF	Skill	Mark	Answer	Further Information	
(a)	5PI5	A	1	1 2 3 4 5 6	more than one answer circled = 0 marks	
(b)	5PI5	A	1	(idea that the word Pierre) is darker / is brighter / can be seen easily (for one material) / can be seen clearly (using one material) / one of them is clear / there is a light and dark Pierre	answer must be a comparison so Pierre is dark (on its own) = 0 marks	
Total			2			

Question number		11		CPS00467		
Part	CF	Skill	Mark			Further Information
	4Cs3	K	2	At sea level water boils at 90 °C.	<input type="checkbox"/>	one mark for each correct tick
				Steam condenses to make water vapour.	<input type="checkbox"/>	three ticks, two correct = 1 mark
				The boiling of water is an irreversible process.	<input type="checkbox"/>	three ticks, one correct = 0 marks
				The freezing point of water is the same as the melting point of ice.	<input checked="" type="checkbox"/>	four ticks = 0 marks
				The melting point of ice is 0 °C	<input checked="" type="checkbox"/>	
				Water evaporates to make ice.	<input type="checkbox"/>	
Total			2			

Question number			12	CPS00506		
Part	CF	Skill	Mark	Answer	Further Information	
	5Bp3	A	2	 <p>coconut</p> <p><u>water</u></p>  <p>cow-pea</p> <p><u>explosion</u></p>  <p>dandelion</p> <p><u>wind</u></p>  <p>orange</p> <p><u>animal</u></p>	<p>four correct = 2 marks</p> <p>two or three correct = 1 mark</p> <p>one correct = 0 marks</p>	
Total			2			

Question number			13	CPS00444		
Part	CF	Skill	Mark	Answer	Further Information	
	5Pb3	K	1	Chen Mike Oliver	more than one circle = 0 marks	
Total			1			

Question number		14	CPS00262		
Part	CF	Skill	Mark	Answer	Further Information
(a)	3Cp4	A	2	<p>This is because plastic does not dissolve (in water) / is insoluble.</p> <p>This is because pottery does not dissolve (in water) / is insoluble / (has a melting point above) 700 °C</p>	each correct answer = 1 mark
(b)	6Cc2	A	1	<p>add water, filter and evaporate the filtrate <input checked="" type="checkbox"/></p> <p>evaporate the mixture and then condense the vapour <input type="checkbox"/></p> <p>filter the mixture <input type="checkbox"/></p> <p>use a magnet <input type="checkbox"/></p>	more than one tick = 0 marks
(c)	6Cc2	A	1	<p>add water, filter and evaporate the filtrate <input type="checkbox"/></p> <p>evaporate the mixture and then condense the vapour <input type="checkbox"/></p> <p>filter the mixture <input type="checkbox"/></p> <p>use a magnet <input checked="" type="checkbox"/></p>	more than one tick = 0 marks
			4		

Question number			15	CPS00268		
Part	CF	Skill	Mark	Answer	Further Information	
(a)	3Bh5 3Eo4	E	1	(area) D / tip of tongue	more than one letter = 0 marks	
(b)	3Bh5 5Eo5	E	1	(idea that) she did not taste any / cannot taste (in the middle part)		
(c)	3Bh5 5Eo7	E	1	yes (idea that) area D can taste sweet / the tip of the tongue can taste sweet	both parts correct = 1 mark	
Total			3			

Question number			16	CPS00411		
Part	CF	Skill	Mark	Answer	Further Information	
	5Pb4	K	1	Albert Einstein <input type="checkbox"/> Galileo Galilei <input type="checkbox"/> Isaac Newton <input checked="" type="checkbox"/> Robert Hooke <input type="checkbox"/>	more than one tick = 0 marks	
Total			1			

Question number			17	CPS00477		
Part	CF	Skill	Mark	Answer	Further Information	
(a)	6Pf2	K	1	X Y Z W	more than one letter circled = 0 marks	
(b)	6Pf4	A	1	X Y Z W	more than one letter circled = 0 marks	
Total			2			

Question number			18	CPS00461		
Part	CF	Skill	Mark	Answer	Further Information	
(a)	6Cc3	K	1	Salt dissolves in water to make a solution.	more than one word = 0 marks	
(b)	6Cc3	K	1	Water is the solvent in this process.	more than one word = 0 marks	
(c)	6Cc3	K	1	Salt is the solute in the solution.	more than one word = 0 marks	
(d)	6Cc3	K	1	When water evaporates from the salt solution a white solid is left behind.	more than one word = 0 marks	
(e)	6Cc3	K	1	Sand does not make a solution when mixed with water because it is insoluble .	more than one word = 0 marks	
Total			5			

Question number			19	CPS00522		
Part	CF	Skill	Mark	Answer	Further Information	
(a)	5Ep4 5Bp3	E	1	(idea of) a fair test / to make it fair		
(b)	5Ep4 5Bp3	E	1	(idea of same) speed / time / shoe(s)		
Total			2			

