



**Cambridge International Examinations**  
Cambridge Primary Checkpoint

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**SCIENCE**

**0846/01**

Paper 1

**October 2016**

MARK SCHEME

Maximum Mark: 50

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This document consists of **11** printed pages and **1** blank page.






<b>Question number</b>	<b>1</b>		
<b>Part</b>	<b>Mark</b>	<b>Answer</b>	<b>Further Information</b>
	3	kidneys / kidney lungs / lung heart brain stomach	<b>five</b> correct = 3 marks <b>three</b> or <b>four</b> correct = 2 mark <b>two</b> correct = 1 mark <b>one</b> correct = 0 marks
<b>Total</b>	<b>3</b>		

<b>Question number</b>	<b>2</b>		
<b>Part</b>	<b>Mark</b>	<b>Answer</b>	<b>Further Information</b>
	3	a force  slow down  air resistance	each correct answer = 1 mark
<b>Total</b>	<b>3</b>		

<b>Question number</b>	<b>3</b>		
<b>Part</b>	<b>Mark</b>	<b>Answer</b>	<b>Further Information</b>
<b>(a)</b>	1	fats / oils / sweets	
<b>(b)</b>	1	fruit / vegetable	<b>Accept</b> named fruits or vegetables  <b>Accept</b> vitamins / minerals  <b>Accept</b> named vitamins / named minerals e.g. vitamin A  <b>Ignore</b> fibre
<b>Total</b>	<b>2</b>		

Question number	4																											
Part	Mark	Answer	Further Information																									
	4	<table border="1"> <thead> <tr> <th>change</th> <th>reversible</th> <th>irreversible</th> </tr> </thead> <tbody> <tr> <td>cooking rice</td> <td></td> <td>✓</td> </tr> <tr> <td>dissolving sugar in water</td> <td>✓</td> <td></td> </tr> <tr> <td>burning wood</td> <td></td> <td>✓</td> </tr> <tr> <td>evaporating salt water</td> <td>✓</td> <td></td> </tr> <tr> <td>melting iron</td> <td>✓</td> <td></td> </tr> <tr> <td>attracting steel to a magnet</td> <td>✓</td> <td></td> </tr> <tr> <td>baking bread</td> <td></td> <td>✓</td> </tr> </tbody> </table>	change	reversible	irreversible	cooking rice		✓	dissolving sugar in water	✓		burning wood		✓	evaporating salt water	✓		melting iron	✓		attracting steel to a magnet	✓		baking bread		✓	<p><b>seven</b> correct = 4 marks</p> <p><b>six</b> correct = 3 marks</p> <p><b>five</b> correct = 2 marks</p> <p><b>four</b> correct = 1 mark</p> <p><b>one two or three</b> correct = 0 marks</p> <p>If same row ticked twice then 0 marks for that row</p>	
change	reversible	irreversible																										
cooking rice		✓																										
dissolving sugar in water	✓																											
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<b>Total</b>	<b>4</b>																											

Question number	5		
Part	Mark	Answer	Further Information
(a)	2	<p><b>any two from</b></p> <p>wood / glass / plastic / garden (material) waste / food (waste) / soil / paper / cardboard / oil / textiles / metal / named metal</p>	<p>each correct answer = 1 mark</p> <p><b>Accept</b> any <b>material</b> that can be recycled e.g. <b>plastic</b> bottle / <b>aluminium</b> can</p> <p><b>Ignore</b> water bottle / foil / tissue</p>
(b)	1	<p><b>any one from</b></p> <p>reducing waste / reduce the use of plastic or metal</p> <p>reducing energy consumption</p> <p><b>encourage others</b> to care for the environment / <b>encourage others</b> to not pollute the environment</p> <p>not burning things</p> <p>reuse material (e.g. reuse plastic bags)</p> <p>not cutting down trees / plant trees</p> <p>conserve water</p>	<p><b>Accept</b> do not drop litter / pick up litter</p> <p><b>Accept</b> examples of using alternative fuels e.g. use solar power instead of coal</p> <p><b>Accept</b> using a bike instead of a car / drive less / stop using cars</p> <p><b>Accept</b> protect wildlife</p> <p><b>Accept</b> save water / reuse water</p>
<b>Total</b>	<b>3</b>		

Question number	6		
Part	Mark	Answer	Further Information
	3	<p><b>type of electrical component</b>      <b>symbol</b></p> <p>switch      </p> <p>wire      </p> <p>lamp      </p> <p>cell      </p> <p>resistor      </p>	<p><b>five</b> correct = 3 marks</p> <p><b>three</b> or <b>four</b> correct = 2 marks</p> <p><b>two</b> correct = 1 mark</p> <p><b>one</b> correct = 0 marks</p> <p>If more than one line from a component then 0 marks for that component</p>
<b>Total</b>	<b>3</b>		

Question number	7																																				
Part	Mark	Answer	Further Information																																		
	5	<table border="1"> <thead> <tr> <th rowspan="2">material</th> <th colspan="4">properties</th> </tr> <tr> <th>Is it hard?</th> <th>Is it a liquid at room temp?</th> <th>Is it soluble in water?</th> <th>Is it attracted to a magnet?</th> </tr> </thead> <tbody> <tr> <td>mercury</td> <td>(no)</td> <td><b>yes</b></td> <td>(no)</td> <td><b>no</b></td> </tr> <tr> <td>iron</td> <td><b>yes</b></td> <td><b>no</b></td> <td><b>no</b></td> <td><b>yes</b></td> </tr> <tr> <td>salt</td> <td>(yes)</td> <td><b>no</b></td> <td><b>yes</b></td> <td>(no)</td> </tr> <tr> <td>sand</td> <td>(yes)</td> <td>(no)</td> <td><b>no</b></td> <td>(no)</td> </tr> <tr> <td>wood</td> <td>(yes)</td> <td>(no)</td> <td><b>no</b></td> <td><b>no</b></td> </tr> </tbody> </table>	material	properties				Is it hard?	Is it a liquid at room temp?	Is it soluble in water?	Is it attracted to a magnet?	mercury	(no)	<b>yes</b>	(no)	<b>no</b>	iron	<b>yes</b>	<b>no</b>	<b>no</b>	<b>yes</b>	salt	(yes)	<b>no</b>	<b>yes</b>	(no)	sand	(yes)	(no)	<b>no</b>	(no)	wood	(yes)	(no)	<b>no</b>	<b>no</b>	<p><b>eleven</b> correct = 5 marks</p> <p><b>eight nine</b> or <b>ten</b> correct = 4 marks</p> <p><b>six</b> or <b>seven</b> correct = 3 marks</p> <p><b>four</b> or <b>five</b> correct = 2 marks</p> <p><b>two</b> or <b>three</b> correct = 1 mark</p> <p><b>one</b> correct = 0 marks</p>
material	properties																																				
	Is it hard?	Is it a liquid at room temp?	Is it soluble in water?	Is it attracted to a magnet?																																	
mercury	(no)	<b>yes</b>	(no)	<b>no</b>																																	
iron	<b>yes</b>	<b>no</b>	<b>no</b>	<b>yes</b>																																	
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sand	(yes)	(no)	<b>no</b>	(no)																																	
wood	(yes)	(no)	<b>no</b>	<b>no</b>																																	
<b>Total</b>	<b>5</b>																																				

Question number	8		
Part	Mark	Answer	Further Information
	1	Seeds are made when pollen <b>fertilises</b> the ovum.	<b>Accept</b> any indication of the correct answer  more than one answer = 0 marks
<b>Total</b>	<b>1</b>		

Question number	9		
Part	Mark	Answer	Further Information
	1	<b>any one from</b>  so they cannot <b>see</b> the food  so they are <b>only</b> using the sense of smell / so they have to rely on the sense of smell  if we do not cover their eyes they will know what food it is	<b>Ignore</b> to make the test fair
<b>Total</b>	<b>1</b>		

Question number	10		
Part	Mark	Answer	Further Information
	1	The flower that has male <b>and</b> female organs is flower <b>A</b> .  The flower that has <b>female</b> organs <b>only</b> is flower <b>C</b> .  The flower that has <b>male</b> organs <b>only</b> is flower <b>B</b> .	all three correct = 1 mark
<b>Total</b>	<b>1</b>		

Question number	11		
Part	Mark	Answer	Further Information
(a)	1	centigrade <b>decibels</b> Newtons seconds	<b>Accept</b> any indication of the correct answer  more than one answer circled = 0 marks
(b)	1	67 <b>74</b> 84 86	<b>Accept</b> any indication of the correct answer  more than one answer circled = 0 marks
(c)	1	<b>decreases</b> increases stays the same	<b>Accept</b> any indication of the correct answer  more than one answer circled = 0 marks
<b>Total</b>	<b>3</b>		

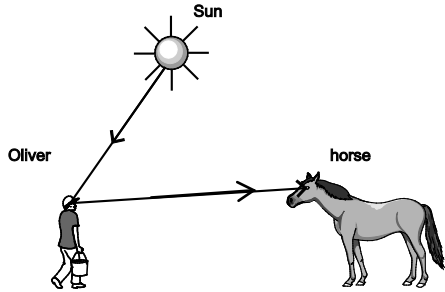
Question number	12		
Part	Mark	Answer	Further Information
	2		each correct answer = 1 mark  If either number written more than once then 0 marks for that number
<b>Total</b>	<b>2</b>		

Question number	13		
Part	Mark	Answer	Further Information
	2	<b>any two from</b> white (fur) / camouflage thick fur / long fur / layers of fur a lot of fat / thick fat / (thick) blubber black skin large body small ears good eyesight sharp teeth / sharp canines wide paws / big paws / large paws / flat paws non-slip paws / rough paws good sense of smell	each correct answer = 1 mark
<b>Total</b>	<b>2</b>		

Question number	14		
Part	Mark	Answer	Further Information
(a)	1	evaporation	<b>Do not accept</b> boiling
(b)	1	condensation	
(c)	1	0 °C	<b>Answer must have the unit</b> °C and not just ° or just C and <b>not C°</b>  <b>Accept</b> the unit as degrees centigrade / degrees Celsius
<b>Total</b>	<b>3</b>		



Question number	15		
Part	Mark	Answer	Further Information
(a)	1	When Blessy pulls the string, the forearm <b>moves up / bends up raises / rises / lifts up / moves towards the upper arm</b>	<b>Ignore</b> just moves <b>Do not accept</b> contract
(b)	1	blood vessel bone joint <b>muscle</b> skin	more than one answer circled = 0 marks <b>Accept</b> any indication of the correct answer
<b>Total</b>	<b>2</b>		

Question number	16		
Part	Mark	Answer	Further Information
	3		<p>line from Sun to Oliver = 1 mark line must touch Oliver</p> <p>line from Oliver to horse's eye = 1 mark line must touch the horses' eye</p> <p>all arrows correct with at least one arrow drawn = 1 mark</p> <p>if line drawn between Sun and horse only arrow mark can be awarded</p>
<b>Total</b>	<b>3</b>		

Question number	17		
Part	Mark	Answer	Further Information
(a)	1	one bump / one dot / one Braille / one point / one circle / one button	<b>Accept</b> not trying to feel for a pattern
(b)	1	<b>any one from</b>  has the fewest repeats  identifies the <b>letter(s)</b> first / identifies the <b>letter(s)</b> fastest  identifies the most letters / can feel the most correctly  reads the best	Answer must be comparative
<b>Total</b>	<b>2</b>		

Question number	18		
Part	Mark	Answer	Further Information
(a)	1	thermometer	
(b)	1	balance / scale(s)	<b>Do not accept</b> weighing machine / measuring scale
(c)	1	idea of a fair test	<b>Accept</b> they do not change more than one factor
(d)	2	50 (°C)  idea that the two masses are very different	each correct answer = 1 mark  <b>Accept</b> because the second mass was much lower / there was a big drop for the second mass  <b>Accept</b> all the other results are within 0.2 g of each other / there is an irregular pattern between the first and second result
(e)	2	any value less than 16 (g) and greater than 11.2 (g)  idea of mass increases (with temperature) / amount get greater	each correct answer =1 mark  <b>Accept</b> more fertilizer (can be dissolved as temperature increases)
<b>Total</b>	<b>7</b>		

