



Mark Scheme (Results)

Summer 2013

PLSC Science (JSC01/01)  
Edexcel International  
Primary Curriculum

Year 6 Achievement Test

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Publications Code PL036676

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## General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

## SECTION A

Question Number	Answer	Mark
1	B	1
2	C	1
3	D	1
4	C	1
5	D	1
6	B	1
7	C	1
8	C	1
9	D	1

Question	Acceptable answers	Additional guidance	Mark														
10(a)	<table border="1"> <thead> <tr> <th rowspan="2">Solid</th> <th colspan="2">Properties</th> </tr> <tr> <th>Dissolves in water</th> <th>Magnetic</th> </tr> </thead> <tbody> <tr> <td>Sand</td> <td>No</td> <td>No</td> </tr> <tr> <td>Sugar</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Iron filings</td> <td>No</td> <td>Yes</td> </tr> </tbody> </table> <p>1 mark per correct row</p>	Solid	Properties		Dissolves in water	Magnetic	Sand	No	No	Sugar	Yes	No	Iron filings	No	Yes		3
Solid	Properties																
	Dissolves in water	Magnetic															
Sand	No	No															
Sugar	Yes	No															
Iron filings	No	Yes															

Question	Acceptable answers	Additional guidance	Mark
10(b)	Evaporation	Accept evaporating Accept description involving heat(ing) the solution to drive off water	1

**Total for Question 10 = 4 marks**

Question	Acceptable answers	Additional guidance	Mark
<b>11(a)</b>	(The metal) conducts electricity	Accept is an (electrical) conductor	<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>11(b)</b>	'Someone touching the wire might get an electric shock' ticked	Accept any other unambiguous mark in the box	<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>11(c)</b>	(Bulb 2) will go out	Accept it will not light/work	<b>1</b>

**Total for Question 11 = 3 Marks**

Question Number	Answer	Mark
<b>12</b>	A	<b>1</b>
<b>13</b>	B	<b>1</b>
<b>14</b>	C	<b>1</b>
<b>15</b>	C	<b>1</b>
<b>16</b>	D	<b>1</b>
<b>17</b>	D	<b>1</b>
<b>18</b>	A	<b>1</b>
<b>19</b>	A	<b>1</b>
<b>20</b>	B	<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>21(a)</b>	D	If all parts if more than one answer given no marks Accept naming of 'claws'	<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>21(b)</b>	A	Accept naming of 'tail'	<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>21(c)</b>	B	Accept naming 'eyes'	<b>1</b>

**Total for Question 21 = 3 Marks**

Question	Acceptable answers	Additional guidance	Mark
<b>22</b>	Cell (1)		<b>3</b>
	Current (1)		
	Ammeter (1)		

**Total for Question 22 = 3 Marks**

Question Number	Answer	Mark
<b>23</b>	C	<b>1</b>
<b>24</b>	D	<b>1</b>
<b>25</b>	D	<b>1</b>
<b>26</b>	B	<b>1</b>
<b>27</b>	B	<b>1</b>
<b>28</b>	C	<b>1</b>
<b>29</b>	A	<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>30(a) (i)</b>	Any one from water snail, tadpole or water flea	If more than one answer given then all must be correct	<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>30(a) (ii)</b>	Any one from kingfisher, great diving beetle or frog	If more than one answer given then all must be correct	<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>30(b)</b>	They (waterlilies) need <b>a lot/lots</b> of sunlight/so they can get <b>enough</b> sunlight/so they can get <b>plenty of/more</b> sunlight	Do not accept light on its own – must be qualified Ignore references to air/space/room/heat/temperature	<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>30(c)</b>	(The water lily) would <u>grow</u> more / bigger /better	Ignore reference to healthiness (of lilies)	<b>1</b>

**Total for Question 30 = 4 Marks**

Question	Acceptable answers	Additional guidance	Mark
<b>31(a)</b>	Any <b>two</b> from two or more substances (1) that are together but are not (chemically) joined (1) that are easily separated (1)		<b>2</b>

Question	Acceptable answers	Additional guidance	Mark
<b>31(b)</b>	Emulsion		<b>1</b>

**Total for Question 31 = 3 Marks**

## SECTION B

Question	Acceptable answers	Additional guidance	Mark
<b>32(a)</b>	(Amount of) light <b>(1)</b>  (Amount of) water <b>(1)</b>	Ignore reference to dark/darkness  Accept reference to how wet and how dry or wetness and dryness/dampness	<b>2</b>

Question	Acceptable answers	Additional guidance	Mark
<b>32(b)</b>	Both headings should be suitable, e.g. Section/choice chamber/habitat/letter AND Number of Woodlice <b>(1)</b>  Correct data for each column/row <b>(1)</b>	Reject bar charts	<b>2</b>

Question	Acceptable answers	Additional guidance	Mark
<b>32(c)</b>	(Woodlice prefer/like) dark damp places/Z	Answer must refer to both dark and damp	<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>32(d)</b>	Repeat (their experiment)  OR  Compare their results to another group (doing the same test).  OR  Add / use <u>more</u> woodlice.  OR  Add new / fresh / different woodlice	Accept suggestions that more data is needed, only if an indication of what data will be collected is given.	<b>1</b>

**Total for Question 32 = 6 Marks**



Question	Acceptable answers	Additional guidance	Mark
<b>33(a)</b>	C - 100cm <sup>3</sup> cylinder		<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>33(b)</b>	1(g)		<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>33(c)</b>	<p><b>Any two from:</b></p> <p>Stir (the mixture) (1)</p> <p>Heat the water / hot(ter) water /warm(er) water (1)</p> <p>Grind up / powder the salt (1)</p>	Accept idea of finer salt	<b>2</b>

**Total for Question 33 = 4 Marks**

Question	Acceptable answers	Additional guidance	Mark
<b>34(a)</b>	Carla (Which is the best material?)		<b>1</b>

Question	Acceptable answers	Additional guidance	Mark
<b>34(b)</b>	<b>Any two from:</b>  Width (1)  Length (1)  Same (number of) mass(es) (1)	Amount/size of material worth 1 mark only  Accept weight  Ignore references to time	<b>2</b>

Question	Acceptable answers	Additional guidance	Mark
<b>34(c)</b>	All bars drawn correctly (1)  All fabrics named/use of key (1)	Line graph = no marks	<b>2</b>

**Total for Question 34 = 5 Marks**

**Total for Paper = 60 Marks**

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Summer 2013

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