Mark Scheme (Results)
Summer 2013

PLSC Science (JSC01/01)<br>Edexcel International Primary Curriculum

Year 6 Achievement Test

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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 <br> Number | Answer | Mark |
| :--- | :--- | :---: |
| $\mathbf{1}$ | B | $\mathbf{1}$ |
| $\mathbf{2}$ | C | $\mathbf{1}$ |
| $\mathbf{3}$ | D | 1 |
| $\mathbf{4}$ | C | 1 |
| $\mathbf{5}$ | D | 1 |
| 6 | B | 1 |
| 7 | C | 1 |
| $\mathbf{8}$ | C | 1 |
| 9 | D | 1 |


| Question | Acceptable answers |  |  | Additional guidance | Mark |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10(a) |  |  |  |  | 3 |
|  | Solid | Propert |  |  |  |
|  |  | Dissolves in water | Magnetic |  |  |
|  | Sand | No | No |  |  |
|  | Sugar | Yes | No |  |  |
|  | Iron filings | No | Yes |  |  |
|  | 1 mark | er correct row |  |  |  |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{1 0 ( b )}$ | Evaporation | Accept evaporating <br> Accept description involving <br> heat(ing) the solution to <br> drive off water | $\mathbf{1}$ |

Total for Question $10=4$ marks

| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{1 1 ( a )}$ | (The metal) conducts electricity | Accept is an (electrical) <br> conductor | $\mathbf{1}$ |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{1 1 ( b )}$ | 'Someone touching the wire might <br> get an electric shock' ticked | Accept any other <br> unambiguous mark in the <br> box | $\mathbf{1}$ |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{1 1 ( c )}$ | (Bulb 2) will go out | Accept it will not light/work | $\mathbf{1}$ |

Total for Question 11 = 3 Marks

| Question <br> Number | Answer | Mark |
| :--- | :--- | :---: |
| 12 | A | 1 |
| 13 | B | 1 |
| 14 | C | 1 |
| 15 | C | 1 |
| 16 | D | 1 |
| 17 | D | 1 |
| 18 | A | 1 |
| 19 | A | 1 |
| 20 | B | 1 |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{2 1 ( a )}$ |  | If all parts if more than one <br> answer given no marks <br> Accept naming of 'claws' | $\mathbf{1}$ |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{2 1 ( b )}$ | A | Accept naming of 'tail' | $\mathbf{1}$ |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{2 1 ( c )}$ | B | Accept naming ‘eyes’ | $\mathbf{1}$ |

Total for Question 21 = 3 Marks

| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{2 2}$ | Cell | (1) |  |
|  | Current | (1) |  |
|  | Ammeter | (1) |  |

Total for Question 22 = 3 Marks

| Question <br> Number | Answer | Mark |
| :--- | :--- | :---: |
| $\mathbf{2 3}$ | C | $\mathbf{1}$ |
| $\mathbf{2 4}$ | D | 1 |
| $\mathbf{2 5}$ | D | 1 |
| 26 | B | 1 |
| 27 | B | 1 |
| 28 | C | 1 |
| 29 | A | 1 |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{3 0 ( a ) ( i )}$ | Any one from water snail, <br> tadpole or water flea | If more than one answer given <br> then all must be correct | $\mathbf{1}$ |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{3 0 ( a ) ( i i )}$ | Any one from kingfisher, great <br> diving beetle or frog | If more than one answer given <br> then all must be correct | $\mathbf{1}$ |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{3 0 ( b )}$ | They (waterlilies) need a <br> lot/ lots of sunlight/so they <br> can get enough sunlight/so <br> they can get plenty of/more <br> sunlight | Do not accept light on its own - <br> must be qualified <br> Ignore references to <br> air/space/room/heat/temperature <br> and | $\mathbf{1}$ |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{3 0 ( c )}$ | (The water lily) would grow <br> more / bigger /better | Ignore reference to healthiness <br> (of lilies) | $\mathbf{1}$ |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{3 1 ( a )}$ | Any two from <br> two or more substances (1) <br> that are together but are not <br> (chemically) joined (1) <br> that are easily separated (1) |  | $\mathbf{2}$ |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{3 1 ( b )}$ | Emulsion |  | $\mathbf{1}$ |

Total for Question 31 = 3 Marks

## SECTION B

| Question | Acceptable answers | Additional guidance | Mark |  |
| :--- | :--- | :---: | :--- | :---: |
| $\mathbf{3 2 ( a )}$ | (Amount of) light | (1) | Ignore reference to <br> dark/darkness | $\mathbf{2}$ |
| (Amount of) water | (1) | Accept reference to <br> how wet and how dry <br> or <br> wetness and <br> dryness/dampness |  |  |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{3 2 ( b )}$ | Both headings should be suitable, <br> e.g. Section/choice <br> chamber/habitat/letter AND <br> Number of Woodlice <br> Correct data for each column/row <br> (1) | Reject bar charts | $\mathbf{2}$ |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{3 2 ( c )}$ | (Woodlice prefer/like) dark damp <br> places/Z | Answer must refer to both <br> dark and damp | $\mathbf{1}$ |


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

Total for Question 32 = 6 Marks

| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{3 3 ( a )}$ | C $-100 \mathrm{~cm}^{3}$ cylinder |  | $\mathbf{1}$ |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{3 3 ( b )}$ | $\mathbf{1 ( g )}$ |  | $\mathbf{1}$ |


| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{3 3 ( c )}$ | Any two from: |  |  |
|  | Stir (the mixture) | (1) |  |
| Heat the water / hot(ter) water |  |  |  |
| /warm(er) water | (1) |  |  |
|  | Grind up / powder the salt | (1) | Accept idea of finer salt |

Total for Question 33 = 4 Marks

| Question | Acceptable answers | Additional guidance | Mark |
| :--- | :--- | :--- | :---: |
| $\mathbf{3 4 ( a )}$ | Carla (Which is the best material?) |  | $\mathbf{1}$ |


| Question | Acceptable answers | Additional guidance | Mark |  |
| :--- | :--- | ---: | :--- | :---: |
| $\mathbf{3 4 ( b )}$ | Any two from: | (1) | Amount/ size of material <br> worth 1 mark only |  |
|  | Width | (1) |  |  |
|  | Length | Same (number of) mass(es) | (1) | Accept weight |
|  |  | Ignore references to time |  |  |


| Question | Acceptable answers | Additional guidance | Mark |  |
| :--- | :--- | ---: | :--- | :---: |
| $\mathbf{3 4 ( c )}$ | All bars drawn correctly | (1) | Line graph = no marks | $\mathbf{2}$ |
|  | All fabrics named/use of key | (1) |  |  |

## Total for Question 34 = 5 Marks <br> Total for Paper = 60 Marks

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