

EXAMINATIONS COUNCIL OF SWAZILAND
Swaziland Primary Certificate Examination

Science

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Confidential

MARK SCHEME

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MARKS: 60

This document consists of **6** printed pages.

SECTION A

- 1 (a) (i) vertebrates; [1]
 (ii) insects; [1]
 (b) backbone/vertebrae/ vertebral column; [1]
 (c) four legs; two eyes; [2]
 (d) animal **A**- hair/ hard/ dry skin ;
 animal **B**- soft moist skin; [2]
 (e)

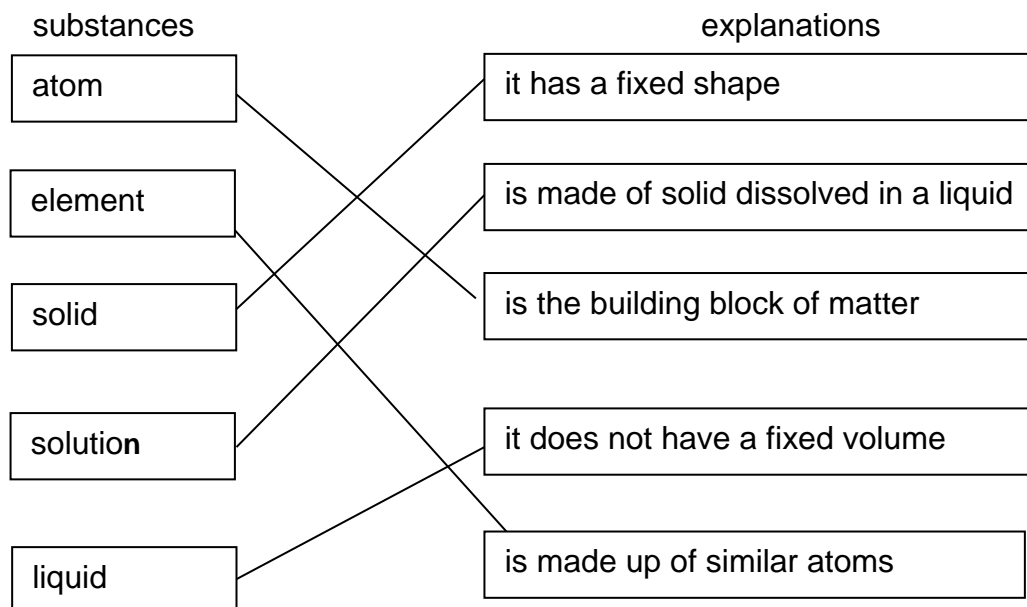
	animal A	animal B
reproduce	lay live young ones	lay many eggs
feeding	breastfeeding	young ones feed on their own on tiny grains

max [3]

[Total: 10]

- 2 (a) Draw a line to match the substances on the left with the correct explanation on the left.

The first one has been done for you.



Max

[4]

- (b)
- | | | | |
|--|-------|------------------------------|-----|
| | (i) | hand picking beans ; | [1] |
| | (ii) | filtering with filter paper; | [1] |
| | (iii) | use a magnet; | [1] |
- (c)
- | | | | |
|--|-------|----------------|-----|
| | (i) | liquid to gas; | [1] |
| | (ii) | heat; | [1] |
| | (iii) | water | [1] |

[Total: 10]

- 3 (a) Practical application of science knowledge/ skills; to industry or practical problems; [2]
- (b) (i) share information, search/ access information; interact with others; watch videos; Skype; [2]
{accept any 2 other correct function of internet}
- (ii) Accessing unreliable information.
 Accessing pornography; [1]
{any other correct one misuse of internet}
- (c) (i) television - entertainment/ access news/ access information; [1]
 (ii) fridge-preserve food/ keeps food for some time before getting spoiled; [1]
 (iii) helicopter – fast to travel/ get to far places within a short time; [1]
- (d) Over stamping the soil; its fuel fumes causing air pollution; [2]
- [Total: 10]**
- 4 (a) (i) Monday /Friday; [1]
 (ii) battery/ generators/ fossil fuel/ gas/ oil/ solar power/ wind power/ hydroelectric energy/ geothermal energy; [1]
 (iii) Monday and Friday; [1]
 (iv) Ironing/ using stove/ heater/ electric kettle; **{any 2}** [2]
 (v) $50 + 55 + 140 + 120 + 50 + 100 = 520 / 6 = 86.7$ units; [2]
 (vi) Saves electricity consumption [1]
- (b) (i) chemical ; energy in Paraffin and candle [1]
 (ii) fossil fuel/ gas/ oil/ solar power/ wind power/ hydroelectric energy/ geothermal energy; any one [1]
- [Total: 10]**

- 5 (a) (i) combination / reaction between water and oxygen; [1]
- (ii) the change in the rusted coins is not reversible; and the change when ice melts is reversible; [2]
- (b) milk has no definite volume; [2]
a stone has a definite volume;
- (c) (i) an element – silver; [1]
- (ii) an alkali – sodium hydroxide; [2]
- (iii) a mixture – air; [1]
- (d) use **ruuve**, an indicator paper; [2]
if colour is red, acidic;
if colour is blue, alkaline.

[Total: 10]

SECTION B

- 6 (a) mass.- amount of matter in a substance; [1]
- (b) a balance; accept an example of a relevant balance e.g. triple beam balance / arm lever [1]
- (c) Tuesday. [1]
- (d) measure volume of one marble through displacement method; in a measuring cylinder; and multiply; that volume by 15; to get total volume; of marbles sold on Thursday max 4. [4]
- (e) divide the mass 10g/ total volume obtained above. [2]
- (f) g/cm^3 [1]

[Total: 10]

- 7 (a) In science we carry out experiments in order to understand the nature of things and how they behave.
- (i) Light a candle with matches and position it on a one spot; cut board cards and punch holes at the centre of each card; place the cards in front of the light candle such that the holes are in a straight line; place a white sheet of paper in front of the last card opposite the light candle so that you see the light reflected on the paper; that would mean light travels in a straight line. [4]
- (ii) plants leaves turn yellow; and eventually die. [1]
- (b) (i) street lights/ security cameras/ electric light in houses; [1]
street lights – makes people visible; and prevents crime;
security cameras – capture peoples images and action in the area being guarded, therefore prevents any crime. **{any 1}** [1]
- (ii) sun [1]
- (iii) because it has no light of its own but absorbs light reflected by the Sun non-luminous. [1]

[Total: 10]