



**Subject:** Grade 7 Natural Sciences  
**Topic:** Natural Science: Exam Term 2  
**Total:** 114 Marks

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1. A: an antacid tablet 4 marks

**Explanation:**

Antacids are basic substances that can neutralise stomach acid. Orange juice and tomato will increase stomach acid. Salt water is neutral and can cause vomiting.

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2. Reptiles | Reptilia 3 marks

**Explanation:**

Reptiles are animals that are cold-blooded. This means that their blood temperature is the same temperature as their surroundings.

Most reptiles lay eggs and their skin is covered with dry scales.

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3. B: B 4 marks

**Explanation:**

All the other plants in the attached graphic use animals to disperse their seeds. The fruit of the mulberry tree are eaten by birds and the seeds are then spread by droppings. Thorns from the devil's thorn plant stick to the fur of animals and are carried away. Acorns are collected and buried by small animals; they can grow if the animals do not return for them.

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4. C: C 4 marks

**Explanation:**

During filtration, the mixture is passed through filter paper. Sugar, coffee powder and ethanol are all soluble in water. They will pass through the filter paper with the water. Sand does not dissolve in water, so it will stay behind if you filter the mixture.

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5. false 2 marks

**Explanation:**

The salt particles and the water particles are not chemically bonded. The salt and the water can be separated by physical methods.

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6. true 2 marks

**Explanation:**

One of the members in the relationship loses. PREDATION: one is killed and PARASITISM: the host is harmed by the parasite.



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7. B: mutualism

4 marks

**Explanation:**

The crocodile's mouth is kept free of rotting meat and the bird has enough food to eat.

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8. element | elements

3 marks

**Explanation:**

An element consists of only one type of atom. You cannot isolate different substances from a specific element.

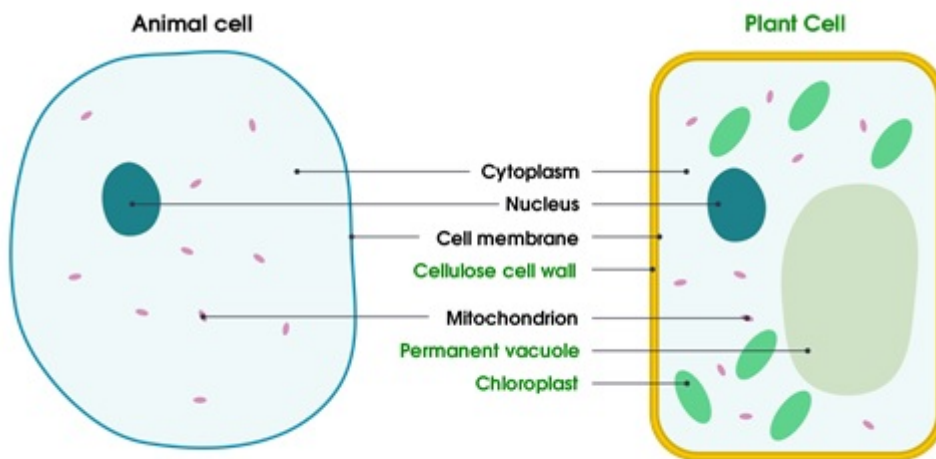
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9. nucleus

3 marks

**Explanation:**

The organisms in these groups have cells that contain a nucleus as well as organelles within a membrane.



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10. vagina | uterus | ovary | Fallopian tube

8 marks

**Explanation:**

The ovaries release egg cells that are carried to the uterus via the Fallopian tubes. If fertilisation occurs, an embryo plants into the uterus and develops into a fetus. The vagina is a passage leading to the cervix.

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11. false

2 marks

**Explanation:**

When acids and bases are mixed together, SALTS are formed.

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12. C: communities

4 marks

**Explanation:**

An ecosystem is made up of a habitat and the community that lives in it.

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13. true 2 marks

**Explanation:**

Monocotyledons have one cotyledon (seed lobe).

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14. D: solid 4 marks

**Explanation:**

The atoms of a solid are held together firmly and give a substance a certain shape.

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15. false 2 marks

**Explanation:**

The symbol for magnesium is Mg. Mn is the symbol for manganese.

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16. A: The soap container shows that it has a lemon fragrance. Lemon juice was probably added to the soap when it was made. 4 marks

**Explanation:**

Soaps often contain additives to give them a certain fragrance. An additive such as lemon juice makes a soap test acidic. Although the human skin is slightly acidic, all soaps are not manufactured to be acidic.

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17. extinct 3 marks

**Explanation:**

The quagga and dodo are examples of animals that are extinct. This means that we will never be able to see them.

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18. false 2 marks

**Explanation:**

Substances such as pure water and cooking oil have no effect on litmus paper. They are not acidic or basic. We say that they are neutral.

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19. Flowers | flower 3 marks

**Explanation:**

The male and female structures necessary for the reproduction of angiosperms are found in the plants' flowers.

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20. temperature | rapid | liquid | gaseous 8 marks

**Explanation:**

When a substance changes from its liquid state to its gaseous state, it is called evaporation or boiling. Boiling is a rapid change in state that occurs at a specific temperature. Evaporation is a gradual process that can occur at any temperature below the boiling point of the substance.

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21. producers | consumers | decomposers 6 marks

**Explanation:**

Consumers eat food, decomposers break down dead substances and producers make their own food.

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22. constant | the same | unchanged 3 marks

**Explanation:**

The temperature of a substance remains constant during a rapid change in state.

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23. aluminium | candle wax | mercury | oxygen 8 marks

**Explanation:**

Aluminium and candle wax are both solids at room temperature, but it is much easier to melt candle wax. Mercury is a liquid and oxygen is a gas at room temperature. Therefore mercury must have a lower melting point than candle wax and oxygen must have a lower melting point than mercury.

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24. exoskeleton | exo-skeleton 3 marks

**Explanation:**

An exoskeleton is a hard outer surface that protects the animal's softer insides.

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25. B | D | E 6 marks

**Explanation:**

Red litmus paper turns blue in a base as in A. Blue litmus paper remains blue in a base as in C. It turns red in an acid as in B and D. Red litmus paper remains red in an acid as in E.

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26. potassium 3 marks

**Explanation:**

The name potassium comes from the English word potash, the everyday name for potassium carbonate. K is the first letter of the Latin word kalium, which refers to potash or potassium carbonate. In Afrikaans the word kaïum is also used for the element potassium.

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27. true 2 marks

**Explanation:**

He was a respected botanist who believed that we should give standardised names to all living organisms.

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28. A: adaptation 4 marks

**Explanation:**

Flowers are adapted in various ways to promote pollination. Colourful petals, sweet nectar and pleasant scents are adaptations that attract pollinators such as insects and birds.

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29. pool acid | lemon juice | cooking oil | dishwashing liquid

8 marks

**Explanation:**

Pool acid is more acidic than lemon juice. Cooking oil is neutral. Dishwashing liquid is basic.

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**Total:** 114 Marks