



Noah's Ark Independent Primary School

Subject: Natural Science	Examiner: Moyo, S
Type: End of Term Three	Moderator: Rwizi, A
Date: 9 October 2020	Grade: 7
Marks: 60 Marks	Time: 2 hours

Name: _____

Instructions:

Answer ALL the questions in the spaces provided.

Write neatly and legibly

Carefully read all questions before answering

Section A

1. Copper is an element on the periodic table.

1.1 Identify copper as a metal or non-metal. (1)

1.2 Copper is used for electrical conducting wires. Give two reasons why copper is the preferred material for this purpose. (2)

1.3 Small pieces of copper are mixed with the pieces of iron of about the same size. Name and describe the method of physical separation you can use to separate the copper from the iron. (2)

2. Humans use a lot of plastic material. This leads to a lot of plastic being discarded as waste. We can reduce the amount of waste by reusing, reducing and recycling the plastic.

2.1 Plastic sheeting can be folded. What property of plastic allows it to be folded. (1)

2.2 Give one use of plastic sheeting that requires this property. (1)

2.3 Compare the melting point of plastics to the melting point of metals. Use either the word HIGHER or LOWER in your answer. (2)

2.4 What group of elements do you expect to find plastics in, based on your answer to question 2.3? (1)

2.5 Describe three problems caused by discarding plastics. (3)

3. Your aunt argues that she cannot separate waste because waste management is the sole responsibility of the municipality. You are not in support of her argument. Justify your opinion. (4)

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4. Study the picture below, which shows a bottle with the corrosive warning label on it.



Spot On Natural Science Learner's Book, Grade 7, page 90

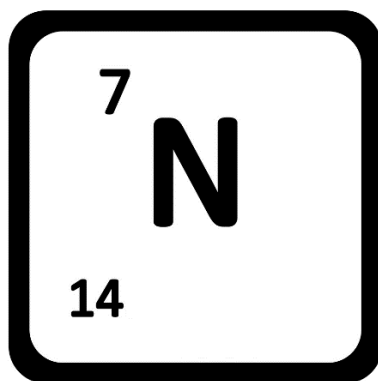
- 4.1 Explain what the word 'corrosive' means. (2)

- 4.2 True or false? Acids and bases can be equally corrosive. Explain your answer. (2)

- 4.3 You notice one of your classmates preparing to test this substance using litmus paper. Explain to your friend why it is important to use both the red and blue litmus paper when testing a substance. (2)

- 4.4 Outline two properties of acids. (2)

5. Look at the image below then answer the following questions.



5.1 What is the name of the element represented by the symbol above. (1)

5.2 State what each number on the symbol represents. (2)

5.3 According to your knowledge of the periodic table this element is in which category of elements. (1)

5.4 Define an element. (1)

Section B:

1. Give one word or term for each of the following descriptions. (3)

1.1 A source of energy that is constantly replenished by an on-going natural process. _____

1.2 A power station that uses uranium fuel. _____

1.3 The type of energy that an object has because of its position. _____

2. Circle the correct answer for the questions below. (4)

2.1 Energy is transferred from potential to kinetic energy when

- a. thunder follows lightning
- b. Cindy switches on a light.
- c. a charger recharges the battery in a cell phone
- d. a bird swoops down on its prey

2.2 The following form of energy is NOT present in a burning candle.

- a. electrical potential energy
- b. chemical potential energy
- c. light energy
- d. heat energy

2.3 The method of heat transfer when smoke goes up a chimney is _____.

- a. conduction
- b. convection
- c. radiation
- d. insulation

2.4 The coolest house in summer will have a _____

- a. thatched roof with no ceiling, painted green and north facing windows.
- b. corrugated iron roof with no ceiling, painted dark blue, and east facing windows.
- c. corrugated iron roof with a ceiling, painted white and west facing windows.
- d. thatched roof with ceiling, painted white and north facing windows.

3. Describe the difference between conduction, convection and radiation and give examples to illustrate the differences. (9)

4. Explain how a convection current is created in the air. (3)

5. True or False. Convection can occur in solids. Motivate your answer. (2)

6. State the law of conservation of energy. (3)

7. Your parents are concerned that electricity is consuming a lot of money because it is being wasted but they do not know what they should do to conserve it. Recommend to them at least five ways they can implement to conserve the energy and save money. (5)

8. Define wasted energy. (1)

____ / 60 Marks