



Noah's Ark Independent Primary School

Subject: NS&T	Examiner: Moyo, S
Type: End of Term Three	Moderator: Rwizi, A
Date: 8 October 2020	Grade: 6 - ___
Marks: 50 Marks	Time: 1 hour 15 minutes

Name: _____

Instructions:

Answer ALL the questions in the spaces provided.

Write neatly and legibly

Carefully read all questions before answering

Section A

1. Name the best method to separate the following substances. (3)

1.1 beans and peanuts: _____

1.2 sand and water: _____

1.3 grated cheese and milk: _____

2. Read the case study below and answer the questions that follow:

Dangerous water

Musa Nzimakwe went to visit his family in a rural area of Kwa-Zulu Natal. Musa has piped water in Durban where he lives. At his rural home, people drink the water from a stream running through the village. People also used the bushes near the stream as a toilet. After a few days Musa became very ill with diarrhoea and had to go to hospital. He had cholera, a disease caused by germs in water polluted with human waste. Musa was lucky, people often die from cholera. The local municipality has now provided toilets. But, they did not include an education programme to

teach people how to prevent diseases such as diarrhoea and cholera. They also put in hand pumps to pump water from underground boreholes, but people still use water from the stream because they say it is too far to walk to the hand pumps.

{Adapted from article in EnviroTeach, May 2004, taken from Water Wheel, Nov/Dec 2003, Water Research Commission}

2.1. What is piped water? (1)

2.2 Why is piped water safer than water from a stream or river? (2)

2.3 Why is the water near Musa's home polluted? (1)

2.4 How did the Musa get sick? (1)

2.5 How is cholera caused? (1)

2.6 Determine how the hand pumps and toilets prevent diarrhoea and cholera in communities? (4)

3. The following information shows the results of the effects of temperature on the rate of dissolving. Use the information to draw a line graph. (6)

Temperature of water	100°C	70°C	30°C	0°C
Time taken to dissolve sugar in water (minutes)	1	5	10	14



4. Name the other two factors that affect the rate of dissolving. (2)

5. Write down the word/s that will complete the sentences correctly. (4)

5.1 A _____ is a mixture of two or more substances, usually a solid in a liquid.

5.2 A factor that the person doing an experiment can called the _____ or _____ variable.

5.3 An area where there is water logged soil or soil that is covered with shallow water is called a _____.

5.4 When we remove impurities from water we say the water has been _____.

Section B:

1. Complete the sentences below by choosing the correct words from the word box below. (5)

Word Box		
insulator	generator	conductors
power stations	turbine	non-renewable

1.1 Materials that conduct electricity are called _____.

1.2 An _____ is a material through which electricity can not flow.

- 1.3 In South Africa most of our mains electricity is produced by coal-burning _____.
- 1.4 Coal is an example of a _____ energy source.
- 1.5 A _____ produces electrical energy in a power station.

2. Why are illegal connections so dangerous? (2)

3. Explain the reasons of people using illegal connections? (2)

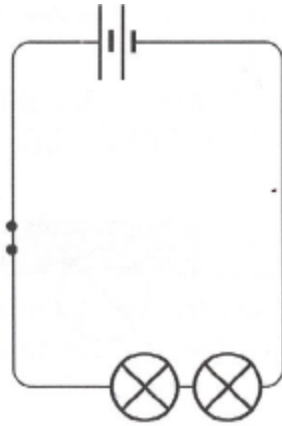
4. Suggest one way of stopping illegal connections. (2)

5. Which appliances uses the most electricity an oven or a radio? (1)

6. Draw a systems diagram to show the input and output of energy of an oven in your home. (3)



7. Look at the image below then answer the following questions:



Oxford Successful Natural Science & Technology Learner's Book, Grade 6, page 92

7.1 Predict what would happen if another bulb was added to the circuit. (1)

7.2 Explain why the bulb would go out if the circuit was broken. (2)

7.3 Predict what would happen to the other bulbs if one of the cells was removed from the circuit. (1)

8. Choose the correct underlined words to make these sentences correct. (2)

8.1 When switches are closed / open they allow electricity to flow in a circuit.

8.2 When switches are closed / open they stop the flow of electricity in the circuit.

9. List any other two output devices except bulbs. (2)

10. Coal can not be replenished once finished. What other sources of energy can be used. Point out only two. (2)

____ / 50 Marks