LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

CAPRICORN SOUTH DISTRICT

NATURAL SCIENCE AND TECHNOLOGY

GRADE 6

TERM 3 TEST

SEPTEMBER 2023

TIME: 90 MIN

MARKS: 40

NAME OF LEARNER: _____

INSTRUCTIONS:

1. **This paper consists of FIVE (5) pages including the cover page**
2. **Answer all questions.**
3. **Write neatly and legibly.**
4. **All the answers should be written in the spaces provide in the question paper.**

QUESTION 1

Choose the correct answer by encircling the letter of the correct answer.
1.1. A material that allow electricity to pass through it is called a-------
A. Insulator
B. Conductor
C. Capacitor
D. Container

1.2. In South Africa…….is mostly used as fossil fuel in generating electricity.
A. Petrol
B. Methane
C. Coal
D. Oil

1.3. Which one of the following is a renewable way of generating electricity?
A. Nuclear power
B. Wind power
C. Coal
D. Natural gas

1.4**.** When a switch is in the "on" position it means that
A. Electricity can flow through the circuit
B. Electricity cannot flow through the circuit.
C. The circuit is broken.
D. The switch is broken.

(4x1=4)

QUESTION 2

Write one term or concept for the following descriptions or statements.

2.1. The remains of dead plants and animals that store energy from the sun from millions of years ago. _____
2.2. A place where electricity is generated. _____
2.3. Sources of energy that can be used up and cannot be replaced by natural Processes. _____
2.4. The use of moving water to generate electrical energy. _____

(4x1=4)

QUESTION 3

3.1. Draw a circuit diagram in the space provided using the following components:

One cell, one bulb and a wire. (3)

3.2. Electrical circuits are used to solve various problems that requires energy in our everyday lives. Energy is transformed from one form to another by electrical circuits. Different appliances have electric circuits that produce different forms of energy.

Complete the following table by filling in the type of output energy produced and the problem that the circuits solves.

Appliances	Output energy	The problem the circuit solves
1.Lamp		
2.Kettle		
3. Hairdryer		

(6x1=6)

3.3. Describe the three things that will be the biggest disaster for you if there was no electricity. (3)

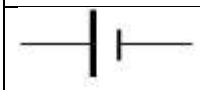
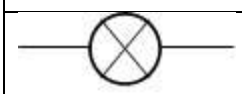
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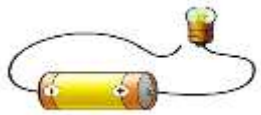
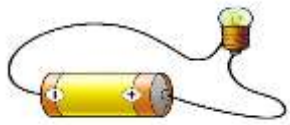
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QUESTION 4

4.1. Identify the symbols of the electrical components below by writing the name of the component next to the correct symbol. (3)

Symbol	**Name**
	
	
_____	

4.2. Carefully look at the circuits in the table below and say in which circuits will the bulb glow. Write yes or no next to each diagram and given a reason for your answer.

Circuits	Will the bulb glow?(Yes or No)	Give a Reason.
		
		

(6)

QUESTION 5

5.1. Suppose you have found a piece of material. You are not sure what the material is. You want to find out if it is a good conductor or a good insulator. Describe in words what you would do to determine if the material is a conductor or insulator.

(5)

_____

_____

_____

_____

_____

_____

5.2. List one example of an insulator and one example of a conductor. (2)

i. Insulator _____

ii. Conductor _____

5.3. Why are insulators important? (1)

_____

QUESTION 6

6.1. Carefully study the information given in the table based on electricity usage and answer questions that follows**.**

Appliance	**Wattage rating**
Heater	2000
Oven	2500
Lamp	1400
Fridge	15
Television	20

6.1.1. List the appliance that uses more electricity._____ (1)
6.1.2. Which appliance uses less electricity?_____ (1)
6.1.3. How can you save electricity at home with regard to using electrical appliances? Give one way. (1)

_____

_____

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