

## SECTION A

### QUESTION 1

- 1.1 The electrical energy movement pathway is known as ...
- A appliance.
  - B electric current.
  - C electric circuit.
  - D component.
- 1.2 The reason why copper wire is commonly used as an electric wire is because ...
- A copper is an insulator.
  - B copper shines.
  - C copper conducts electricity easily.
  - D copper is not magnetic.
- 1.3 ONE of the following devices is used to produce sound energy to help us to protect our homes from burglary:
- A Electric gates
  - B Alarms
  - C Traffic lights
  - D Street lights
- 1.4 Small, rocky space objects that orbit the sun in a zone between Mars and Jupiter are called ...
- A planets.
  - B meteorites.
  - C asteroids.
  - D the moons.
- 1.5 Planet Earth revolves around the sun in an orbit. One complete revolution takes ...
- A 364¼ days.
  - B 365½ days.
  - C 365¼ days.
  - D 365 days.
- (5 x 1) [5]

### QUESTION 2

COLUMN A		COLUMN B
2.1	Come from living things that died millions of years ago	A Astronaut
2.2	Can be seen from the earth because the light from the sun shines on to its surface	B Fossil fuel
2.3	Is used to look into space and gather information	C Revolution
2.4	Two or more cells connected together	D Space Rover
2.5	Is used to collect rock and soil samples and take photographs of the surfaces of the moon and Mars	E Moon
		F Telescope
		G Battery

(5 x 1) [5]

### QUESTION 3

Use the word list to correctly complete sentences below.

Generator	Electrical insulators	Symbols	Components
Turbine		Mercury	Earth

- 3.1 ... are connected together to complete an electric circuit. (1)
- 3.2 ... are used when drawing circuit diagrams. (1)
- In power stations, coal is used to boil water.  
The steam turns a (3.3 ...) in a (3.4 ...) which produces electricity. (1 + 1) (2)
- 3.5 The closest planet to the Earth is ... (1)
- [5]

### SECTION B

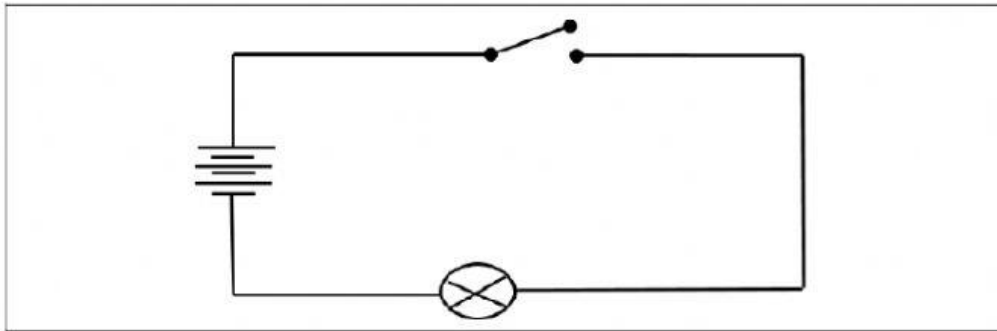
#### QUESTION 4

Write down the scientific word/s for each of the following statements:

- 4.1 A component that controls the flow of electricity (1)
- 4.2 The material through which an electric current can pass (1)
- 4.3 Use of running water to generate electricity (1)
- 4.4 Large steel tower-like structure supporting electrical cables (1)
- 4.5 The spinning of the earth on its own axis (1)
- [5]

### QUESTION 5

Look at circuit diagram below and answer the question that follows.



- 5.1 How many cells are there in the circuit? (1)
- 5.2 What is function of the battery in the circuit? (1)
- 5.3 Why do we need a control device in a circuit? (1)
- 5.4 Which device produces the output energy? (1)
- 5.5 Will the current flow in the circuit? (1)  
Explain your answer. (2) (3)
- 5.6 Suggest a reason why an electrician uses circuit diagrams when dealing with electricity. (2)  
[9]

### QUESTION 6

Look at the pictures below and answer that follows.



6.1 Mention TWO objects above that can act as *conductors* and TWO that can act as *insulators*. (2 x 2) (4)

6.2 State ONE reason why you classified it as conductors and ONE reason why you classified it as insulators. (1 + 1) (2)

6.3 Which material is an insulator in a light bulb? (1)

### QUESTION 7

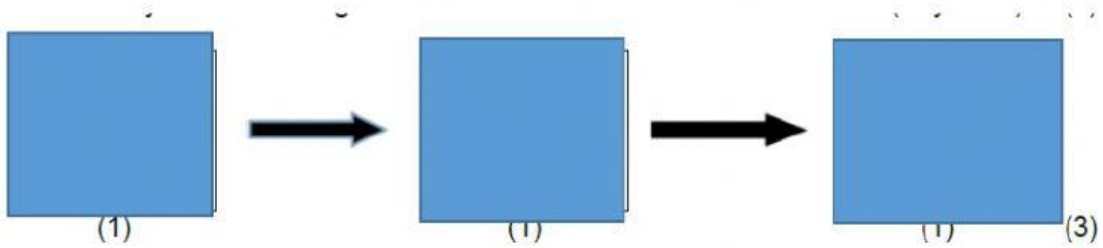
A television is an example of an electric system.

7.1 Identify the **input**, **process** and **output** of a TV-set. (3)

7.2 Name ONE example of an object that has an electric circuit that produces a movement. (1)

7.3 Draw a systems diagram of the light bulb system.

(3 x 1) (3)



7.5 Sakhie is Grade 6 learner at Caley JSS. He tested the alarm at his home. It did not work when current flowed in the circuit. Suggest any TWO possible reasons for this.

(2 x 1) (2)

#### QUESTION 8

8.1 List TWO ways in which we can save electricity.

(2 x 1) (2)

8.2 Differentiate between the following terms:

8.2.1 Renewable resources

(1)

8.2.2 Non-renewable resources

(1)



8.3 Look at the labels below and answer the questions.

 <p><b>LAMP</b></p>	 <p><b>RADIO</b></p>
 <p><b>IRON</b></p>	 <p><b>HAIRDRYER</b></p>

8.3.1 Draw a table to compare the different wattages of the four appliances. (1 mark each) (4)

8.3.2 What can you conclude about different appliances from the results displayed in the table? (2)

8.3.3 Give any TWO dangers of connecting electricity illegally. (2)