

SECTION A:**QUESTION 1: MULTIPLE CHOICE**

(Select the correct answer. Please write only the letter next to the corresponding number.)

1) Which of the following is the original source of energy?

- a) Wind
- b) Water
- c) Sun
- d) Coal

2) Planets cannot produce their own light because...

- a) ...they are at the centre of the solar system.
- b) ...they are made of rocks.
- c) ...of their atmosphere.
- d) ...they reflect light from the sun.

3) Which of the following is **NOT** an insulator?

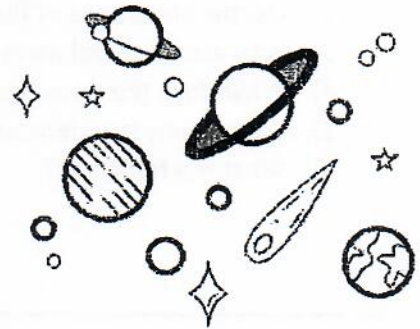
- a) Plastic straw
- b) Rubber band
- c) Pencil Lead
- d) Chalk

4) The Inner Planets (Rocky Planets) are:

- a) Jupiter, Saturn, Mars, Uranus
- b) Earth, Venus, Saturn, Mercury
- c) Jupiter, Saturn, Uranus, Neptune
- d) Mercury, Venus, Earth, Mars

5) The acronym SALT stands for:

- a) South Africa Large Telescope
- b) Southern African Large Telescope
- c) Southern African Long Telephone
- d) South African Large Telephone



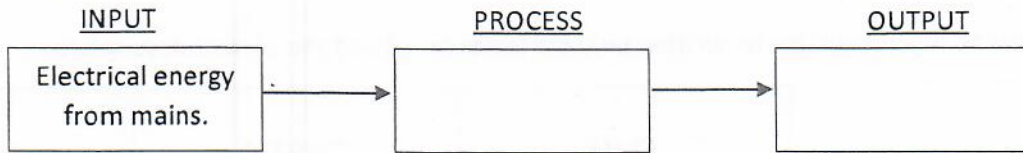
SECTION B:

QUESTION 1:

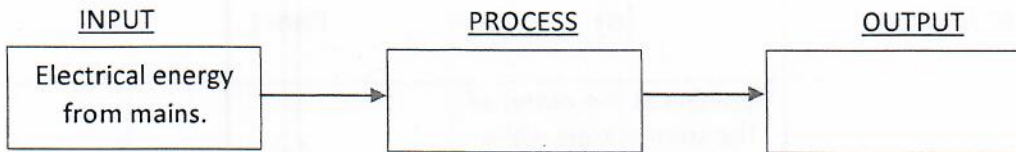
Copy and complete the system diagrams for the following:

(Remember: A system diagram has an INPUT -> PROCESS -> OUTPUT)

1) Toaster



2) Car

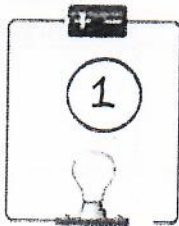


[4]

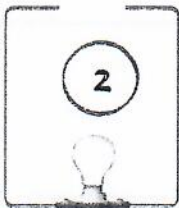
QUESTION 2:

State whether the following diagrams will allow for the lightbulb to burn and explain why or why not.

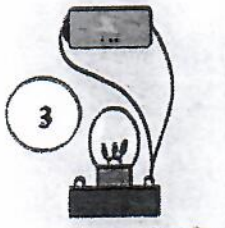
1)



2)

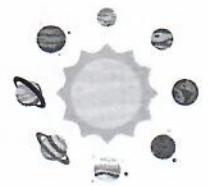


3)



[6]

SECTION C: EARTH AND BEYOND



QUESTION 1:

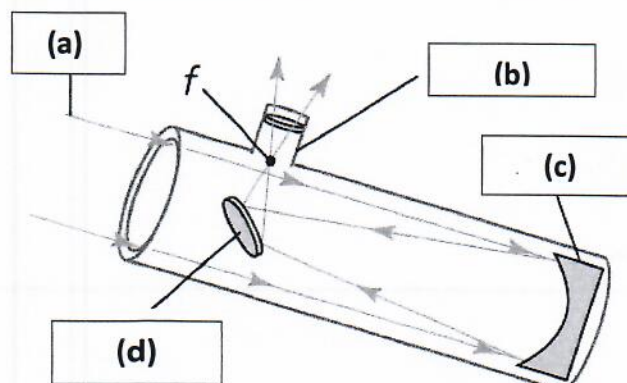
Complete the following table by writing only the letter (a – j) and the correct description:

	<u>SUN</u>	<u>EARTH</u>	<u>MOON</u>
Kind of Object	(a)	Planet	(b)
Movement	Remains at the center of the solar system while planets revolve around it	(c)	(d)
Atmosphere	(e)	(f)	None
Radiation of Light	(g)	(h)	Does not produce its own light. The moon reflects the light that reaches it from the sun.
Presence of Water	None	(i)	(j)

[10]

QUESTION 2:

- 1) Explain, briefly, the purpose of a telescope. (1)
- 2) In four points, explain how a telescope works. (5)
- 3) Provide labels for the telescope below. (Write only the letter and the correct label) (4)



[10]

QUESTION 2: MATCH COLUMN A WITH COLUMN B

(Choose the correct answer in column B and match it with the correct number in column A.

Eg. 1. F)

	Column A		Column B
1)	Resistance	a)	The movement of electric charges through a conductor.
2)	Voltage	b)	Something that is made up of two or more parts that work together to do a specific job.
3)	Electric Current	c)	The measure of electrical pressure.
4)	System	d)	The closed path along which electric charges flow.
5)	Electric Circuit	e)	Measure of how difficult it is for an electric current to pass through a material.

[5]

QUESTION 3: SHORT QUESTIONS

- 1) Which planet is the closest to the Sun and which planet is the furthest? (2)
- 2) List the SIX phases of the Moon. (EXCLUDING: FULL MOON and NEW MOON) (3)
- 3) Why are electrical wires covered in plastic? (1)
- 4) What does the term "conductivity" refer to? (1)
- 5) Explain why you think an electrician would wear gloves while working with electricity. (2)
- 6) What is a fossil fuel? (1)

[10]

SECTION A TOTAL: [20]

