

**Elementary Science and
Technology**

PEST

26 Oct. 2011 9.00 AM - 11.00 AM

REPUBLIC OF RWANDA



RWANDA EDUCATION BOARD (REB)

P.O BOX 3817 KIGALI TEL/ FAX: 586871

Pupil's complete index number

<i>Province/City</i>	<i>District</i>	<i>Sector</i>	<i>School</i>	<i>Pupil</i>

Pupil's names:

Surname.....

Other names.....

PRIMARY LEAVING NATIONAL EXAMINATION 2011

OCTOBER 2011

ELEMENTARY SCIENCE AND TECHNOLOGY

DURATION: Two hours

Marks:

/100

Instructions

- Write in the space provided in your question paper your index number and names in full as written on your registration form.
- Answer all questions.
- Write your answers in the space provided on your question paper.
- Read each question carefully before answering it.
- Do not make alterations.

SECTION A: (50 MARKS)

1. Name any three tools used by a farmer.

- (a) (1 mark)
(b) (1 mark)
(c) (1 mark)

2. Why is the air of the atmosphere important for lives? Give two reasons.

- (a)
.....
..... (2 marks)
(b).....
.....
..... (2 marks)

3. What is a magnet?

..... (1 mark)

4. Give two reasons to show why light from the sun is important.

- (a)
.....
..... (2 marks)
(b)
.....
..... (2 marks)

5. Why are white clothes more comfortable to wear on a hot day than dark clothes.?

(4 marks)

.....
.....
.....
.....
.....

6. Name and draw a labelled diagram of an instrument used to measure body temperature of people. **(4 marks)**

- a) The instrument is called
- b) The diagram of the instrument

7. State 3 methods of heat transfer.

- (a)..... **(1 mark)**
- (b)..... **(1 mark)**
- (c)..... **(1 mark)**

8. Why do we use blankets to cover ourselves at night ? **(3 marks)**

.....
.....
.....

9. Does sound travel through solids ? Explain your answer. **(3 marks)**

.....
.....

10. A vacuum is a space completely empty of matter.

- (a) Does sound travel through a vacuum?

..... **(1 mark)**

- (b) Does light travel through a vacuum?

..... **(1 mark)**

- (c) What would happen to a balloon full of air if it were taken in a vacuum ?

.....
..... **(1 mark)**

Write **TRUE** for the correct statement or **FALSE** for the wrong statement for questions 11 to 15.

11. A stone sinks into water because it is hard.
 (1 mark)
12. Light travels through translucent objects.
 (1 mark)
13. Sound travels through water.
 (1 mark)
14. Electricity is a manmade source of energy.
 (1 mark)
15. Metals are poor conductors of heat.
 (1 mark)
16. Complete the table below. (2 marks)

Mass, g	Volume, cm ³	density, g/cm ³
1.8		0.9
	3	13.2

17. (a) How are trees important to the environment.
 i)..... (1 mark)
 ii)..... (1 mark)
- (b) Mention two uses of timber
 i).....
 ii)..... (2 marks)
18. Electricity in homes makes everyday life good. Mention three ways by which electricity makes life good.
 (a) (1 mark)

 (b)..... (1 mark)

(c)..... (1 mark)

19. Why do we use soap to wash clothes ? (2 marks)

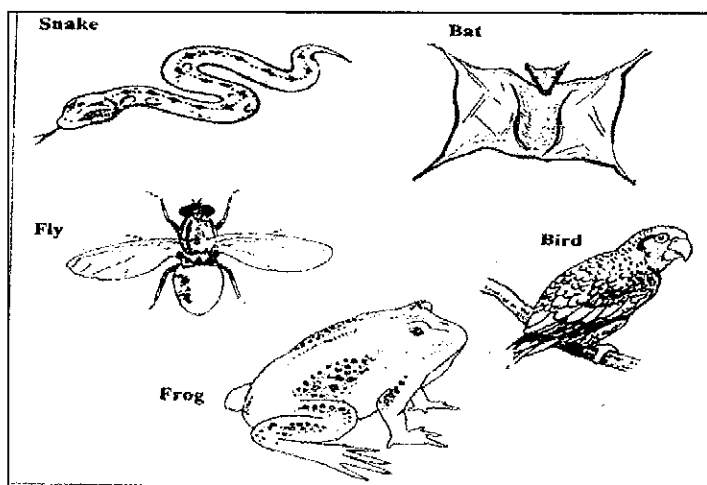
.....
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20. The clothes are spread for drying after washing them. Explain this drying up process. (2 marks)

.....
.....
.....
.....

SECTION B (50 Marks)

21. Use the diagram below to answer the questions that follow



a) Which of the above animals lay eggs?..... --

..... (4 marks)

b) Which of the animals are cold- blooded?

..... (2 marks)

c) Which of these animals is a mammal?..... (1 mark)

22. a) How do we call a reproductive cell of a:
i) woman? (1 mark)

ii) man? (1 mark)

c) How are the cells named in (a) above different in shape and size? (2 marks)

.....

23. Fill in the table below with the example of each given group. (7 marks)

Group of animals	Examples
Insects	
Arachnids	
Crustaceans	
Molluscs	
Flat worms	
Segmented worms	
Myriapods	

24. Answer the following questions using True(T) or False (F)

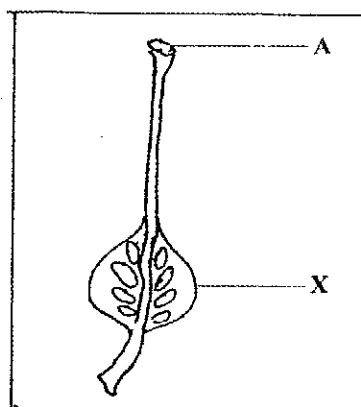
(i) The virus causing AIDS can be transmitted through sexual intercourse..... (1 mark)

(ii) Mosquitoes transmit the virus that causes AIDS. (1 mark)

(iii) An infected pregnant woman can pass on aids to the Child..... (1 mark)

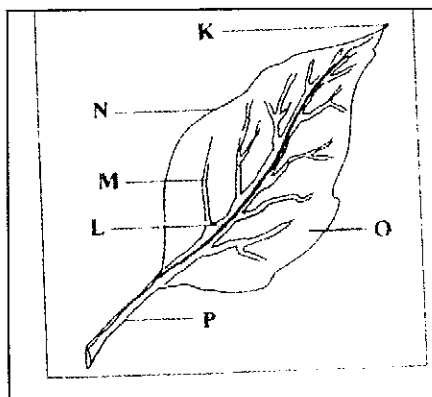
(iv) Although AIDS is in all parts of the World, it no longer kills People..... (1 mark)

25. The diagram below shows part of a flower.



- a) (i) The part marked X develops into.....
after pollination? **(1 mark)**
- (ii) How is the part marked A useful to the flower?
.....**(2 marks)**

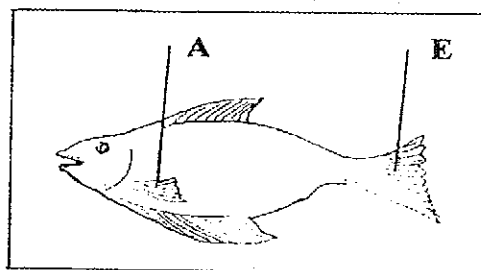
26. The diagram below is of a simple leaf.



Name the parts marked K, L, M, N, O and P

- K.....**(1 mark)**
- L.....**(1 mark)**
- M.....**(1 mark)**
- N.....**(1 mark)**
- O.....**(1 mark)**
- P.....**(1 mark)**

27. The diagram below is of a Tilapia fish. Use it to answer the questions that follow.



- a) i) Name the part labeled A..... **(1 mark)**
- (ii) How is part E useful to the fish?.....
.....**(1 mark)**
- (iii) Which parts on the fish help it to protect itself in water.....

-(2 marks)
- b) What is the importance of eating fish?..... (2 marks)
28. a) What is plasma?.....
- (1 mark)
- b) Name the blood vessel that carries blood :
- (i) From the liver to the Vena Cava (1 mark)
- (ii) From aorta to the Stomach and intestines..... (1 mark)
- (iii) From the lungs to the heart. (1 mark)
29. a)What is the name of the Vein that connects the liver to the small Intestines?..... (1 mark)
- b) What does the vein carry to the liver..... (1 mark)
30. Name the three types of teeth found in human beings and give the functions of each.
- Type 1..... Function
- (1 mark)
- Type 2.....Function.....
- (1 mark)
- Type 3.....Function.....
- (1 mark)
31. a) A balanced meal is one that
-(1 mark)
- b) What does one have to consider when preparing a balanced meal?
- (2 marks)