



Noah's Ark Independent Primary School

Subject: Natural Science	Examiner: Moyo, S.
Type: Mid-Year Exam	Moderator: Rwizi, A.
Date: 30 May 2019	Grade: 7
Marks: 100 Marks	Time: 2 hours 30 Minutes

Name: _____

Instructions:

Read the questions carefully before you start writing.

Make sure you answer ALL the questions.

Write neatly and legibly.

Section A: Life and Living

1. Multiple choice: Answer the following questions by circling the best answer to each question. (5)

1.1 A thin layer of gases that surround the earth and sustain life is

- a. Hydrosphere
- b. Lithosphere
- c. Biosphere
- d. Atmosphere

1.2 All of the following are examples of inherited characteristics EXCEPT.

- a. Height
- b. Tattoos
- c. Nose shape
- d. Skin colour

1.3 _____ are invertebrates that have a body that consists of the cephalothorax and an abdomen.

- a. Mollusca
- b. Arthropods
- c. Arachnids
- d. Crustaceans

1.4 The following are Mollusca except.

- a. Spider
- b. Snail
- c. Oysters
- d. Cuttlefish

1.5 Angiosperms is a combination of two words “angi” and “sperma” which are interpreted as.

- a. Encircled and flower
- b. Enclosed and flower
- c. Encircled and seed
- d. Enclosed and seed

2. Briefly describe any three requirements that support life. (9)

3. Complete the following table that shows the distinctive characteristics of a reptile. (5)

Class	Reptile
Habitat	
Respiration method	
Body structure and covering	
Locomotion	
Reproduction	

4. Look at the picture of a hibiscus flower in figure 2.26. Is the hibiscus plant a monocotyledon or a dicotyledon? Explain your answer with reference to the characteristics of monocotyledons and dicotyledons. (4)



Figure 2.26: A hibiscus plant.

5. Briefly explain anther clearly revealing its structure and function. (4)

6. Compare the wind pollination plants and the insect pollination plants. Give 3 points, write your answer in the space provided below. (6)

Wind pollinated plants	Insect pollinated plants

7. Use the picture below to answer the questions that follow.

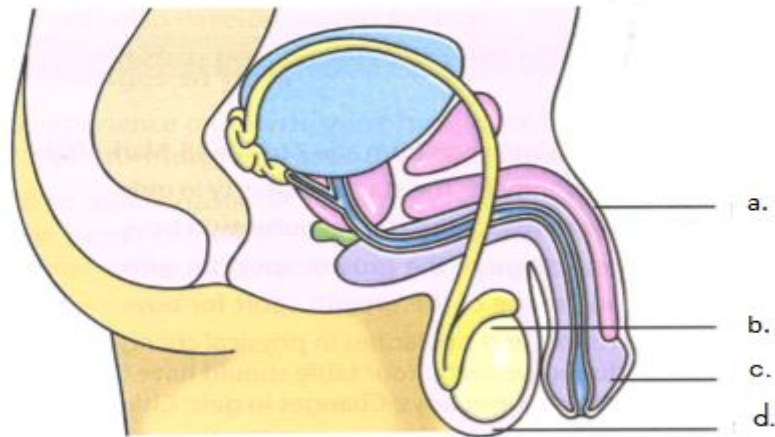


Figure 4.3: The male reproductive organs (external).

7.1 Identify the parts represented by the letters a-d. (4)

a. _____

b. _____

c. _____

d. _____

7.2 What is the function of the scrotum and the testis. (2)

8. Your friend argues that the use of condoms is not necessary and condoms are schemes to make money for the manufacturers. You believe he is wrong. Justify why you do not agree with him. Give him at least 4 points. (8)

9. Explain how HIV affects a person. (3)

Section B: Matter and Materials

10. Read the following case study then answer the questions that follow.

Case study: *Wetland filter water*

Filtration is a natural way in which water is cleaned in the environment. In grade 6, you learn that wetlands filter water. The plant roots in a wetland form a natural water filter. They trap the

large particles of impurities and let the water particles through. Nylsvley in Limpopo, and Blesbokspruit in Gauteng, are examples of wetlands.

10.1 Explain the meaning of the terms “filtration” and “insoluble”. (2)

10.2 Explain how wetlands act as natural filters. (3)

10.3 Suggest why wetlands are important to people. (6)

11. Classify the following substances into **acid**, **base** and **neutral**. Write your answers in the space provided. (4)

Word bank			
water	vinegar	sugar	washing powder
salt	soap	lemon juice	tooth paste

ACID	BASE	NEUTRAL

12. State whether the following elements are **metals**, **semimetals** or **non-metals**. Use the periodic table to answer. (3)

12.1 Oxygen _____

12.2 Copper _____

12.3 Silicon _____

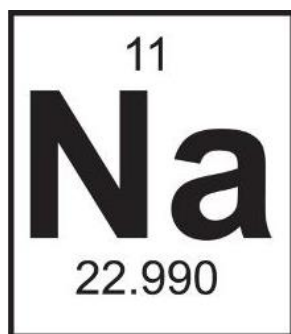
12.4 Phosphorous _____

12.5 Calcium _____

12.6 Helium _____

13. Write the name of an element in the same periods as helium. (1)

14. Use the symbol below to answer the following questions.



14.1 State the name of the element shown above. (1)

14.2 What does the two numbers represent? (2)

15. The photograph below shows water being heated by a Bunsen burner.



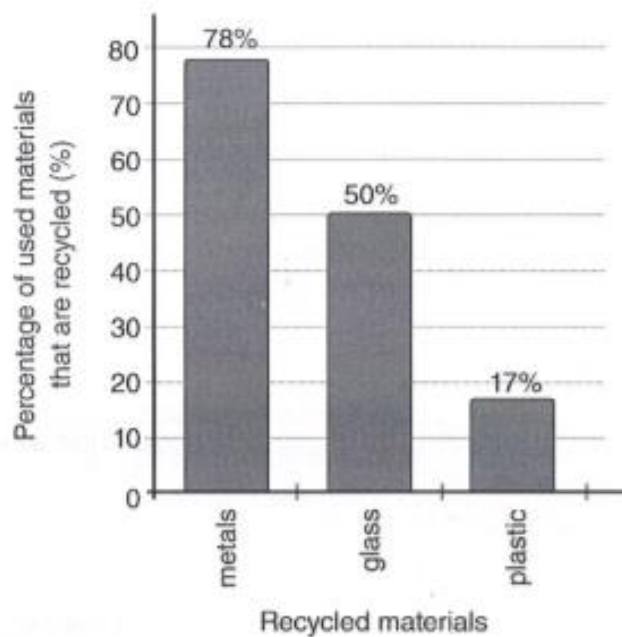
15.1 Explain what the term boiling point means. (1)

15.2 What is the change of state that takes place when water boils? (1)

15.3 Ethanol has a lower boiling point than water. Suggest a method of separation you would use to separate a mixture of ethanol and water. (1)

15.4 The method you described in 15.3 has two parts. Name the two parts. (2)

16. Study the bar graph below and answer the questions that follow.



16.1 Explain what the term "recycle" means. (2)

16.2 Which material does the graph show to be recycled the most? (1)

16.3 What other material that is not on the graph that can be recycled. (1)

16.4 Discuss the impact that waste can have on the environment if these materials are not recycled. (3)

17. The table below shows how the temperature of water increases with time as it is heated with a Bunsen burner.

Time(s)	Temperature of water (°C)
0	20
10	40
20	60
30	80

17.1 Use the data in the table to draw a line graph showing the temperature of the water over time. (6)

18. Explain what will happen to both red litmus and blue litmus paper when they are used to test the following substances. (2)

18.1 Vinegar _____

18.2 Soap _____

19. Complete the following sentences. (4)

19.1 _____ is the only metal that is liquid.

19.2 Heat conductivity can also be called _____.

19.3 _____ are materials with low heat conductivity.

19.4 _____ is used to separate different colour pigments.

20. Explain three ways in which money can be wasted due to poor waste management. (3)

21. Answer the following by stating whether it is true or false. (1)

It is the responsibility of local authorities to dispose waste properly.

_____ / 100 Marks