



# Noah's Ark Independent Primary School

Subject: N. Science & Tech.	Examiner: Moyo, S
Type: End of Year Exam	Moderator: Rwizi, A
Date: 24 November 2020	Grade: 5-_____
Marks: 70 Marks	Time: 1 hour 45 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, Living and Structure

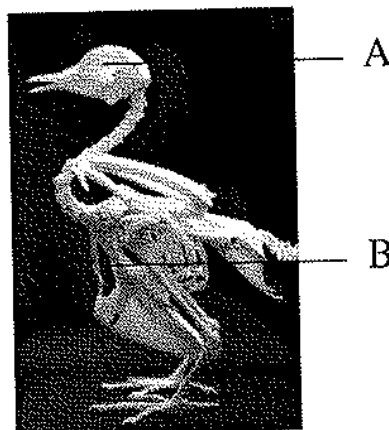
1. Complete the following sentences.

1.1 Skeletons \_\_\_\_\_, gives shape to the body and \_\_\_\_\_ the body. (2)

1.2 \_\_\_\_\_ refers to the different stages in the growth and development of an organism. (1)

1.3 The variety of animals and plants on earth is called \_\_\_\_\_ (1)

2. Study the skeleton below and answer the questions that follow.



2.1 To which animal does this skeleton belongs to? Suggest two reasons to support your answer. (3)

a. \_\_\_\_\_

b. \_\_\_\_\_

2.2 Briefly describe how this animal would move. (1)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2.3 The body of every animal changes over time in order for the animal to be able to survive better in its environment. This change is called adaptation. Explain how the bones of the skeleton above adapted to the way the animals move. (2)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2.4 Name and give the function of the part labelled A. (2)

\_\_\_\_\_  
\_\_\_\_\_

2.5 Skeletons can be grouped into two main groups. Identify these groups and state to which group the above skeleton belongs. (2)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. A food chain consists of a producer and consumers. Demonstrate the difference of these two by clearly explaining what these two mean and by giving examples, you must use a flow diagram to clarify your explanation ensuring that all forms of consumers are reflected. (4)

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\_\_\_\_\_ / 18 Marks (Section A)

Section B: Matter and Materials, and Processing

1. Match column A with column B (3)

Column A	Answer	Column B
Able to be drawn into wires		a) metals
Are brittle, dull, poor conductors of heat		b) malleable
Metal breaking down		c) ductile
		d) tarnish
		e) non-metals
		f) corrode

2. State whether the following sentence are true or false. If false rewrite the true sentence. (5)

2.1 Coiling is the process of making something by crossing strips or threads under and over each other.

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2.2 Alloys are made of two or more metals mixed together or a metal mixed with a non-metal.

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2.3 When mixed with water plaster of paris take long to become hard.

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3. Complete the paragraph below about the process of mixing and setting jelly to make dessert, using the words given in the word bank below. (3)

Word Bank		
different	cooling	mixture
liquid	starting	solid

The new (a) \_\_\_\_\_ will have (b) \_\_\_\_\_ properties from the (c) \_\_\_\_\_ materials. The Jelly powder was (d) \_\_\_\_\_ but it became a (e) \_\_\_\_\_ when water was added. After (f) \_\_\_\_\_ it changed into a solid again.

4. Classify the following properties into properties of non-metals and properties of metals. (4)

Brittle	Strong	Have lustre	Dull
Ductile	Non-ductile	Malleable	Magnetic

Properties of non-metals	Properties of metals

5. James' mother would like to renovate her house and she wants to put a washing basin in her bathroom for the first time, so it becomes classy. Advise her on the type of the washing basin material that is suitable for her need, clearly giving her reasons.(3)

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\_\_\_\_\_ / 18 Marks (Section B)

Section C: Energy, change and systems and controls.

1. Choose the best answer to each question below. (3)

1.1 Electricity is generated at?

- a. Sub-stations.
- b. turbines
- c. generator
- d. power stations




1.2 The following are what should be done when fire breaks out expect.

- a. stay low the ground
- b. jump through the window
- c. crawl away from the fire.
- d. stay calm.

1.3 Energy is stored in a spring when the spring is \_\_\_\_\_.

- a. stretched out
- b. released
- c. compressed
- d. squashed

2. Humans use different sources of fuel for useful energy. Complete the table below. (6)

Pictures of fuel	Name of fuel	Input Energy	Output Energy	Use of the Energy
				
				
				

3. Electricity can be dangerous though useful, if not used with precaution. Suggest three safety precautions that you would put in place to ensure that you do not suffer damages due to electrical use. (3)

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4. A substation is part of the components of the national grid. Describe the role that it plays in the national grid. (4)

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5. A pile of wood does not give off any heat Explain why? (2)

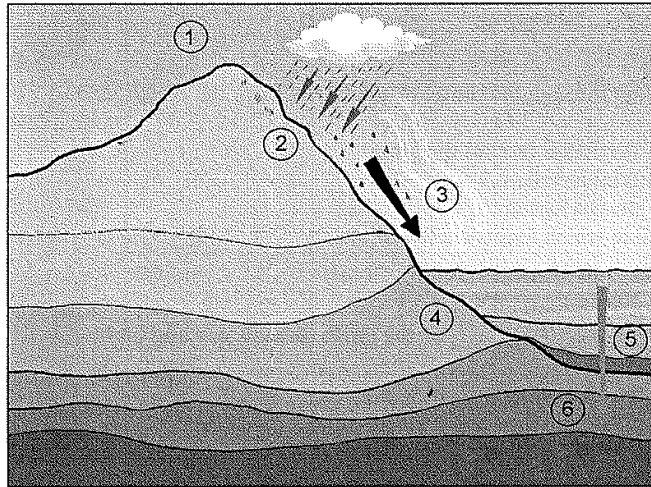
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\_\_\_\_\_ / 18 Marks (Section C)

## Section D: Planet Earth and Beyond

1. Look at the diagram below then answer the questions that follow:



Source: Solutions for All, Natural Science & Technology Grade 5 Teacher's Guide, Page 158

1.1 The diagram shows how a certain type of rock is formed. What type of rock is formed in this way. (1)

1.2 Label the diagram. Write the correct name on the lines provided. (5)

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_

2. Imagine you own a small plot of land on which you want to grow vegetables. Explain how you can make the soil more fertile so that your plant grows better. (1)
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3. Compare the three types of soil in a tabular form below. (2)

Characteristics	Clay	Sand	Loam
Size of particles			
Nutrients			

4. The earth moves in two ways which are rotation and revolution. Distinguish between these two movements of the earth. (2)
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5. Read the following case study then suggest why this discovery was such an important one. (2)

**Case study: Trace fossils discovered in South Africa**




Dinosaur nests containing fossilised eggs were found in the Golden Gate Highlands national park in the Free State.

Some of the eggs contained embryos (baby chicks that had not yet hatched). Footprints of the hatchlings were also found. The nests belonged to dinosaurs called *Massospondylus*. They lived 190 million years ago and were six metres in length. This discovery has provided scientists with evidence that these dinosaurs laid eggs in nests.



Fossilised egg

6. Match the picture in column A to the name in column B. (3)

Column A	Answer	Column B
		a) Mrs Ples
		b) Little Fool
		c) Australopithecus fossil

Source: Day-by-Day, Natural Science & Technology Grade 5 Learner's Book, Page 174.

\_\_\_\_\_ / 16 Marks (Section D)

\_\_\_\_\_ / 70 Marks TOTAL