



Noah's Ark Independent Primary School

Subject: NS&T	Examiner: Moyo, S
Type: End of 3 rd Term Assmt.	Moderator: Rwizi, A.
Date: 13 September 2019	Grade: 4
Marks: 50 Marks	Time: 1 hour 15 minutes

Name: _____

Instructions:

Answer ALL the questions in the spaces provided.

Write neatly and legibly

Carefully read all questions before answering

1. Match column A with column B. (4)

Column A	Answer	Column B
Input energy		a) Something that we get energy from
Transfer of energy		b) The energy that comes out of a system
Source of energy		c) The energy that goes into a system to make it work.
Output energy		d) The process by which energy goes from one part of an energy chain to another.

2. Identify the input energy and output energy of the appliances given in the table below. (6)

Input energy	Device	Output energy
	Toaster	
	Light bulb	
	Radio	

3. State whether the following statements are True or False. (3)

3.1 If there is no input of energy a musical instrument will produce sound on its own.

3.2 A guitar and a trumpet are both string instruments.

3.3 Musical instrument they sometimes cause noise pollution.

4. Briefly explain the signs often displayed by people with damaged hearing. (2x2)

5. Read the case study below then answer the questions.

Losing your hearing

Xolile Nkutha worked as a miner in a gold mine for 24 years. The mine gave the miners ear muffs to protect their ears. The muffs were hot and uncomfortable to wear and the miners could not hear each other when they wore them. Xolile and the other miners did not wear them very often. They did not know that being in the noisy mine for eight hours every day would damage their hearing. Later, Xolile could not hear people properly when they talked to him. He had his hearing tested by an **audiologist**. He had to wait a long time to get a **hearing aid** from the hospital. The hearing aid made the sounds that entered his ears louder so he could hear what people were saying again.

Description	dB levels	Noise source
Damages hearing immediately	140	Shotgun blast
	130	Plane taking off
	120	Vuvuzela
Extremely loud	110	Car hooter
	100	Underground in a mine
	90	Big truck
Damages hearing over time	80	Factory noise
Loud	70	Classroom noise
	60	People talking in the street
Comfortable	50	People talking at home
	40	Fridge humming
Soft	30	Whisper
	20	Watch ticking
	10	Normal breathing

5.1 Give reasons why Xolile and the other miners did not use the ear muffs they were given. (3x1)

5.2 Describe what happened to Xolile later, as a result of not using the ear muffs. (1x2)

5.3 How did the hearing aid help Xolile? (1x2)

5.4 According to the table given on the case study, point out the noise source that damages hearing immediately. (1)

6. Complete the following sentences. Circle the correct answer in brackets. (5)

6.1 How high or low a sound is (volume/ pitch).

6.2 A person who tests hearing and fits hearing aids for people who are hearing – impaired (hearing doctor/ Audiologist/ Psychologist)

6.3 Something that we get energy from (Nutrients/ Source)


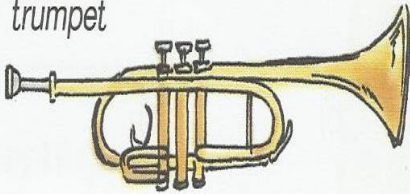

6.4 Two or more parts that work together (system/ chain)

6.5 A high sound is made by (fast / low) vibrations.

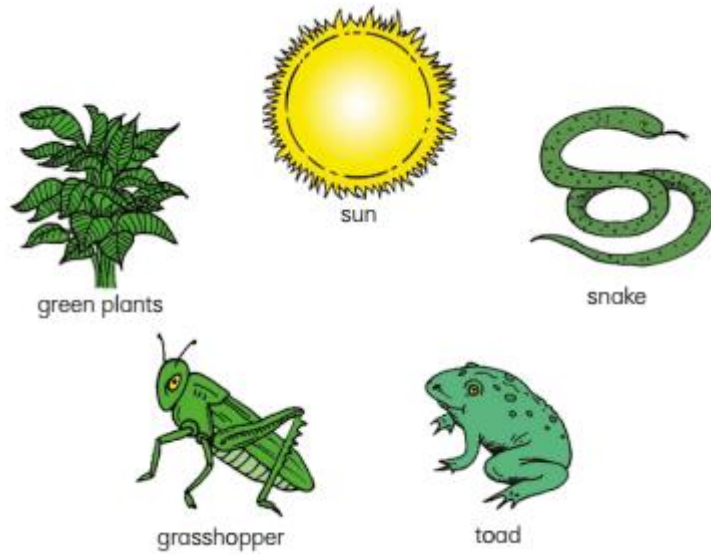
7. Study the musical instruments below and classify them as wind, string or percussion (beating or shaking sound) instrument.

Indicate with the (x) the correct description of the instrument.

(3)

Instrument	Wind	String	Percussion
 <p>violin</p>			
 <p>trumpet</p>			
 <p>drum</p>			

8. Look at the following pictures and answer the following questions:



8.1 Use the pictures above to draw up a food chain. (3)

8.2 Evaluate the importance of the sun in the food chain you drew above. (3x1)

8.3 Differentiate between a herbivore and a carnivore. (4x1)

9. Explain why a fan is both a machine and an appliance. (4x1)

10. Explain why the ear canal is covered in tiny hair and wax. (3x1)

_____ / 50 Marks