basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL ASSESSMENT

MOTHER TONGUE-BASED BILINGUAL EDUCATION (MTbBE): NS & TECH

TERM 3 EXEMPLAR: 2025

IBANGA 4

Isifundo:	Isayensi Yemvelo neThekhnoloji
LoLTA:	IsiZulu
Amamaki:	30
Isikhathi:	Ihora eli-1 **ngaphandle** kwemizuzu eyi-15 yesikhathi sokufunda

Isibongo: ________________________________ **Igama:** ____________________

Ikilasi: _________ **Igama lesikole:** ____________________________________

Isifunda:____

Lesi sivivinyo sinamakhasi ayi-11 ngaphandle kwalelikhasi elimbozile.

Imiyalelo kumfundi

1. Uzonikezwa imizuzu eyi-15 yokufunda ngaphambi kokuphendula lesisivivinyo.
2. Uthisha uzokulekelela ukwenza umsebenzi wokuzijwayeza.
3. Funda yonke imiyalelo nemibuzo ngokucophelela.
4. Phendula yonke imibuzo.
5. Bhala ngobunono nangokufundekayo.
6. Ungasebenzisi ikhalkhuleytha.

Umsebenzi wokuzijwayeza

Indlela yokuphendula umbuzo onezimpendulo ozikhethela kuzona nokulungisa iphutha.

2. Zingaki izinsuku evikini?

A 2

~~B 5~~

C 7

D 31

Uma wenze iphutha ngokukokelezela uhlamvu B, dweba umugqa ku- B kanye nempendulo yakhe. Bese ukokelezela uhlamvu C okuyimpendulo eyiyonayona.

Isivivinyo siqala ekhasini elilandelayo.

Ungalembuli leli khasi uze utshelwe.

ISIGABA A

Kokelezela uhlamvu olunempendulo okuyiyonayona kusukela embuzweni 1.1 – 1.9.

1.1 Iyiphi incazelo okuyiyonayona ye-eneji? I-eneji yinto...

A engasetshenziswa iphele.

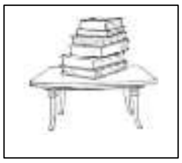
B esisiza ukuthi senze umsebenzi.

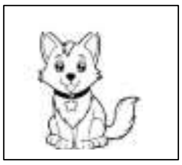
C ebonakala njalo.

D etholakala ezintweni eziphilayo kuphela. (1)

1.2 Yisiphi isithombe esikhombisa ukusetshenziswa kwe-eneji?

A

B 

C 

D (1)

1.3 Khetha uhlu olulungile lokudluliswa kwe-eneji (energy transfer) kokulandelayo.

A utshani → iLanga → inkomo → umuntu

B ILanga → utshani → inkomo → umuntu

C inkomo → iLanga → utshani → umuntu

D ILanga → inkomo → utshani → umuntu (1)

1.4 Isithombe sikhombisa umfana ekhahlela ibhola.

Source:https://clipart-library.com/2023/soccer-player-kicking-the-soccer-ball-clipart-56827547.jpg

Ibhola linaluphi uhlobo lwe-eneji uma lisemoyeni?

A I-eneji yokushisa

B I-eneji yokunyakaza

C I-eneji yokukhanya

D I-eneji yomsindo (1)

1.5 Hlonza umsuka we-eneji (energy source) okhiqiza i-eneji uma ushiswa.

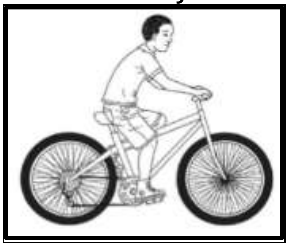
A Ugesi

B Ukudla

C Ibhethri

D Amalahle (1)

1.6 Isithombe sikhombisa umfana eshova ibhayisikili.



Iyini i-inphuthi (input) kanye ne-awthphuthi (output) eneji uma ushova ibhayisikili?

A Inphuthi: I-eneji yokunyakaza. Awthphuthi: I-eneji yomsindo

B Inphuthi: I-eneji yokushisa. Awthphuthi: I-eneji yokunyakaza

C Inphuthi: I-eneji egciniwe. Awthphuthi: I-eneji yokunyakaza

D Inphuthi: I-eneji yokunyakaza. Awthphuthi: I-eneji yokukhanya (1)

1.7 Uzwakala kanjani umsindo uma ushaya isigubhu kakhudlwana?

Umsindo uzwakala …

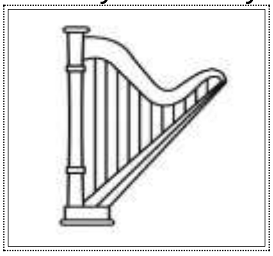
A uphezulu.

B uphansi.

C ushesha.

D upholile. (1)

1.8 Lesi sithombe sikhombisa insimbi yomculo eyaziwa ngokuthi uhabhu.



Uhabhu liwukhiqiza kanjani umsindo?

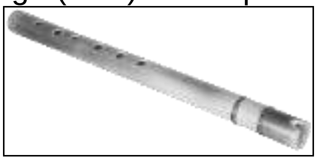
A Ngokushaya (hitting)

B Ngokufutha (blowing)

C Ngokuplakha (plucking)

D Ngokushukuza (shaking) (1)

1.9 Buka isithombe somntshingo (flute) bese uphendula umbuzo olandelayo.



Kwenzekani uma uvala futhi uvule izimbobo zomntshingo ngenkathi uwufutha?

A Izingxenye zawo ziyeka ukudlikiza (vibrate).

B Kuba nzima ukuwufutha.

C Kuba nzima ukuwubamba.

D Umsindo uyashintsha. (1)

Qondanisa amagama akuKholamu A namagama ahambisana nawo akuKholamu B ngokudweba imigqa.

	iKholamu A
1.10	Umsuka (source) we-eneji yokushisa
1.11	Ukufutha
1.12	Ithoshi

iKholamu B		
A	Icilongo (trumpet)	(1)
B	I-eneji yokukhanya	(1)
C	Oshukushuku (Shakers)	(1)
D	Umlilo	

Phendula ezikhaleni ezinikeziwe kusuka emibuzweni 1.13 – 1.20.

Nikeza ithemu EYODWA esitatimendeni ngasinye kulezi ezilandelayo.

1.13 Umsuka omkhulu (main source) we-eneji.

Impendulo: ____ (1)

1.14 Uhlobo lwensimbi yomculo ekhiqiza umsindo ngokuplakha.

Impendulo: ____ (1)

1.15 Ithebula likhombisa ithoshi kanye ne-inphuthi eneji. Qedela izimpendulo ezishodayo ku-a) naku-b). (2)

Idivaysi	**I-inphuthi eneji**	**I-awthphuthi eneji**	**Esikuqaphelayo**
Ithoshi	I-eneji egciniwe kwibhethri	a)____________	b)______________________ ______________________

1.16 Chaza ukuthi izilwane ziyithola kanjani i-eneji evela eLangeni.

Impendulo:

____

____ (2)

1.17 Sebenzisa amagama asebhokisini ukuqedela inkombakulandelana ye-eneji (energy flow diagram).

Intethe (Locust), Ixoxo, ILanga, Amaqabunga

ILanga ⇨ ________ ⇨ Intethe ⇨ ________ (1)

1.18 Nikeza i-aplayensi EYODWA eshintsha i-eneji egciniwe ibe i-eneji yomsindo.

Impendulo:

____ (1)

1.19 Hlukanisa (differentiate) indlela okukhiqizwa ngayo umsindo phakathi kwezinsimbi zomculo ezingamaphikhashini (percussions) kanye nezomoya (wind instruments).

Impendulo:

____ (2)

____

1.20 Shono ukuthi insimbi yomculo ebonisiwe ingeyesimanje noma eyendabuko.

Source: www.thunderboltkids.co.za/Grade4/03-energy-and-change/chapter3.html

Impendulo:

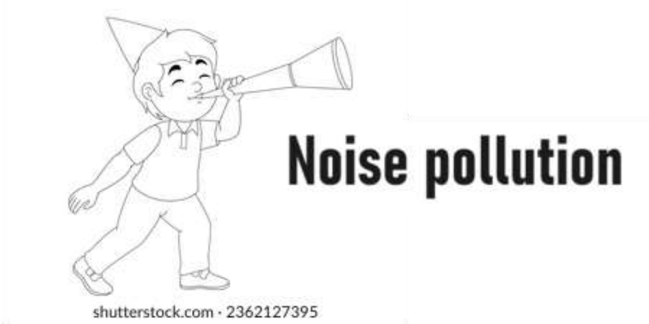
____ (1)

(23)

SECTION: B

Circle the letter of the correct answer for questions 2.1 – 2.3.

2.1 The picture shows a boy blowing a vuvuzela.



Source: Shutterstock.com

Which of the following is an effect of noise pollution?

A Stress

B Peaceful sleep

C Happiness

D Calm (1)

2.2 The picture shows different objects that produce noise pollution.

Source: https://za.pinterest.com>innocentiamnisi84>noise-pollution

What is noise pollution?

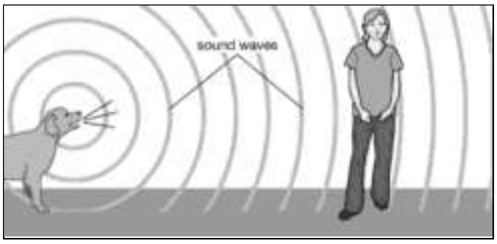
A Harmless sounds that are produced by musical instruments.

B Sounds that make people and animals relax and enjoy music.

C Unwanted sounds that can harm people and animals.

D Sounds that cannot damage our ears and human health. (1)

2.3 Vibrations are rapid back and forth movements. They can be heard, felt and can send energy outwards and make particles in their surroundings vibrate.



Source: teachengineering.org/activities/view/cub_energy2_lesson05_activity2

How does the sound travel to the girl's ears? Through the …

A dog's mouth.

B empty space.

C girl's skin.

D air particles. (1)

Answer questions 2.4 – 2.6 on the spaces provided.

Provide ONE word for each of the following sentences.

2.4 The word that describes how high or low a sound is.

Answer: ____ (1)

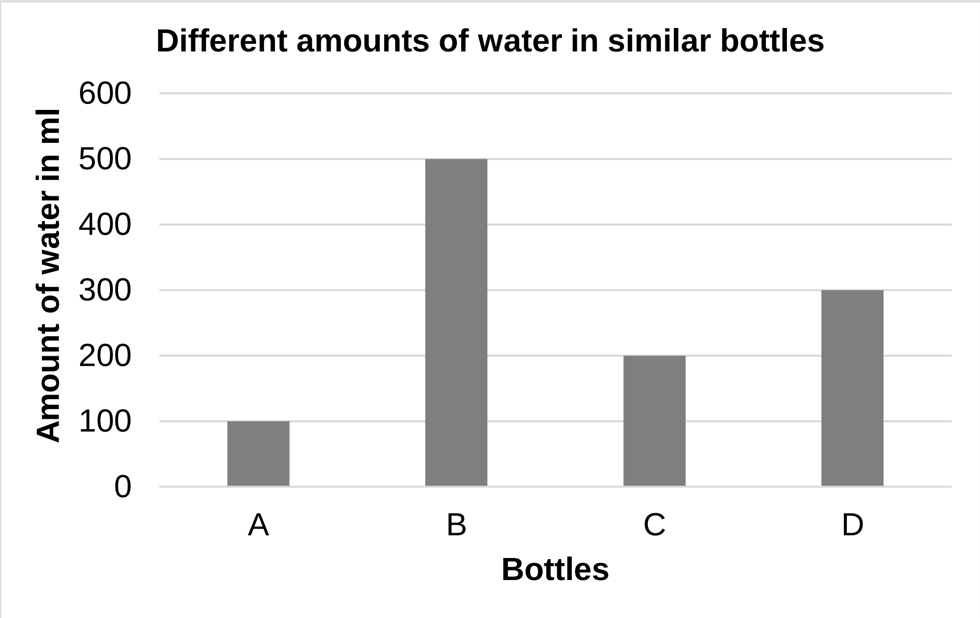
2.5 What must a person do so that a flute produces sound?

Answer: (1)

____

2.6 Study the graph and answer the questions.

The graph shows the amount of water which is in bottles of the same size and type, to make a water marimba. A pencil is used to tap the bottles, making different notes or sounds.



2.6.1 Which bottle produces a high pitch? (1)

Answer:

____

2.6.2 Give a reason for the answer you provided in 2.6.1. (1)

Answer:

____

Isamba: [30]

Ukuphela kwesivivinyo