



education

**MPUMALANGA PROVINCE
REPUBLIC OF SOUTH AFRICA**

NATURAL SCIENCES AND TECHNOLOGY

**KWAMHLANGA SUB-DISTRICT
ASSESSMENT**

GRADE 4

TERM 3 ENERGY AND CHANGE AND SYSTEMS AND CONTROL

TERM 4 PLANET EARTH AND BEYOND AND SYSTEMS AND CONTROL

NOVEMBER 2023

TOTAL MARKS: 30

DURATION: 60 Minutes

SURNAME AND NAME:
NAME OF SCHOOL:
DATE:

INSTRUCTIONS:

1. This question paper consists of 11 pages including the cover page
2. Answer all questions in this question paper
3. Use the spaces provided in this question paper to write your answers
4. Write neatly and legible

ASSESSMENT GRID										
Topics		Cognitive levels						Allocated Time in Recovery ATP	Expected mark/s allocation per topic	Actual mark/s allocated per topic
		Low Order (50%) (Knowledge and Understanding)		Middle Order (35%) (Applying and Analysing)		High Order (15%) (Evaluating and synthesizing)				
		Question	Marks	Question	Marks	Question	Marks			
TERM 3	Energy and energy transfer	1 & 2	5					2.5 weeks	5 marks	5 marks
	Energy around us	1	1	3	3			2 weeks	4 marks	4 marks
	Movement and energy in a system			4 and 5	2	6	3	2.5 week	5 marks	5 marks
	Energy and sound	1 and 2	4	4	1			2 Weeks	4 marks	4 marks
	TOTAL		9 marks		6 marks		3 marks	9 weeks	18 marks	18 marks

Topics		Cognitive levels						Allocated Time in Recovery ATP	Expected mark/s allocation per topic	Actual mark/s allocated per topic
		Low Order (50%) (Knowledge and Understanding) 6		Middle Order (35%) (Applying and Analysing) 4		High Order (15%) (Evaluating and synthesizing) 2				
		Question	Marks	Question	Marks	Question	Marks			
TERM 4	Planet earth	8	2					2 weeks	3 marks	3 marks
	The sun					10	2	1 weeks	2 marks	2 marks
	The earth and sun		2					1 week	2 marks	2 marks
	The moon	7	2	7	1			2 Weeks	3marks	3 marks
	Rocket systems			9,	2			2 weeks	3 marks	2 marks
	Total		6 marks		4 marks		2 marks	8 weeks	12 marks	12 marks

SECTION A

QUESTION 1

Multiple choice question

Choose the correct answer and circle only the letter of the correct answer next to the question number in the spaces provided.

1.1 Which form of energy is produced when a student beats a drum? (1)

- A. Light
- B. Chemical energy
- C. Sound energy
- D. Electrical energy

1.2 Which of the following is an example of a food chain (1)

- A. Grass → fire- → smoke
- B. Seeds → mouse → owl
- C. Boy → girl- → teacher
- D. Dog → mealie → vulture

1.3 All living things need energy to... (1)

- A. Source.
- B. Grow.
- C. Transfer.
- D. Carnivore.

1.4. Sound that is unpleasant to a person's ear. (1)

- A. Movement energy.
- B. Noise pollution.
- C. Singing softly.
- D. Heat energy.

(4)

QUESTION 2

Match column A with column B and write your answer in the answer column:

Column A	Column B	Answer 2.1.B	
2.1 The type of energy that is generated by the sun	A. Whistle		(1)
2.2 The type of energy that you hear.	B. Energy		(1)
2.3 You play it by blowing.	C. Input energy		(1)
2.4 The energy that goes into a system (like a musical instrument) and make it work.	D. Sound energy		(1)
	E. Solar energy		

(4)

QUESTION 3

Fill in the missing words by using the words in the box below:

Input	quieter	output	loud
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3.1 Beat the drum hard to make a _____ sound. (1)

3.2 Beat it gently to make a _____ sound. (1)

3.3 The energy you need to beat the drum is the _____ energy. (1)

(3)

QUESTION 4

Answer these questions to identify THREE types of energy

4.1 What type of energy can people hear? (1)

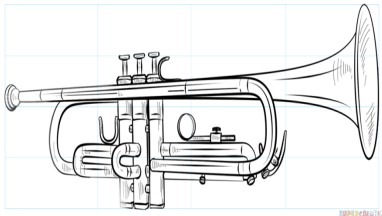
4.2 What type of energy do you need when you are cold? (1)

4.3 What type of energy helps people to see when it is dark? (1)

(3)

QUESTION 5

Sort the names of the following instruments in the correct column. Write only the correct name in the correct column below

 Guitar	 Drum	 Trumpet
--	--	--

String instrument	Wind instrument

(2)

QUESTION 6

Type of musical instruments

Musicians usually group musical instruments according to how we play them. Different instruments need different types of movement as input energy. There are three main types of musical instruments that are shown below:

Percussion Instruments:



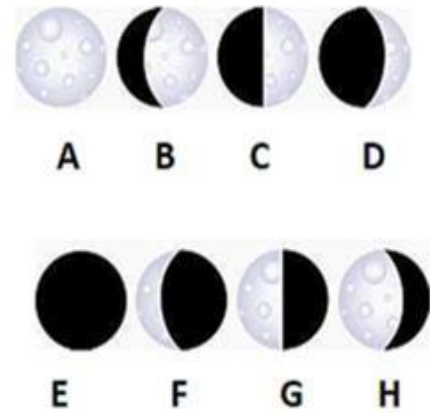
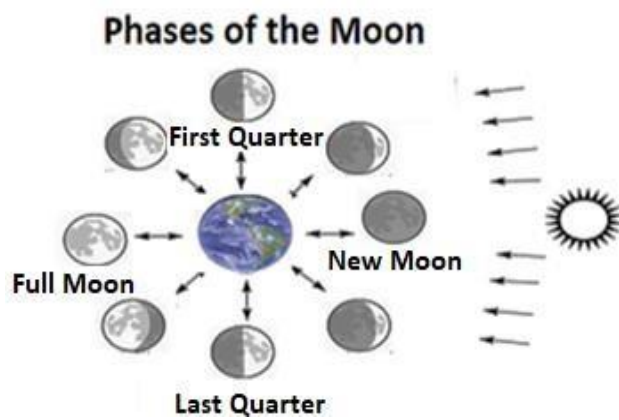
6.1 Explain how a percussion instrument is played? (2)

(2)

Energy and Change Systems and Control Term 3 =18 MARKS

SECTION B

QUESTION 7



7. Read the following and answer the following questions with **True or False**

7.1 There is no liquid water on the Moon. _____ (1)

7.2 The moon produces its own light. _____ (1)

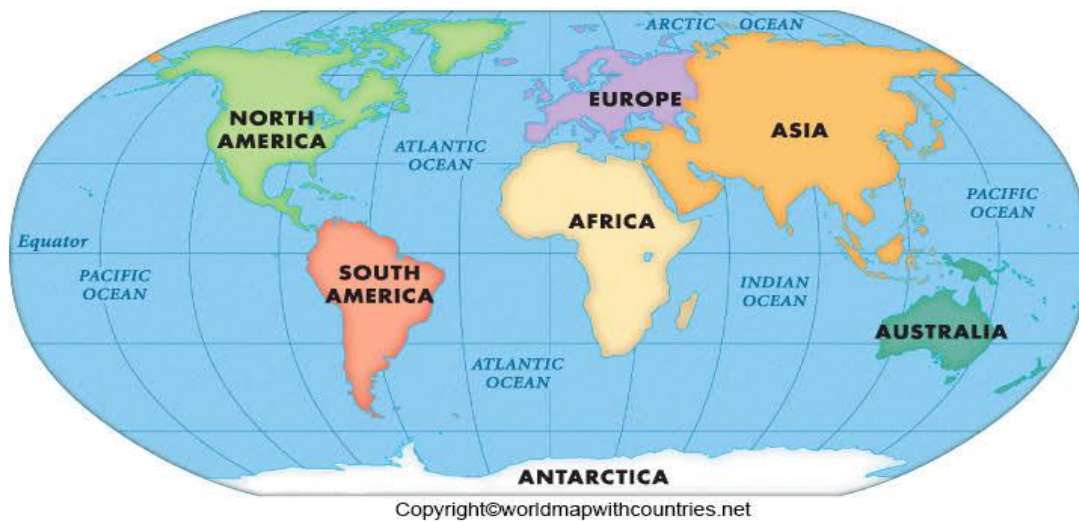
7.3 Define the moon

_____ (1)

(4)

QUESTION 8

Study the picture below and answer the questions



8.1 List any two continents that you know:

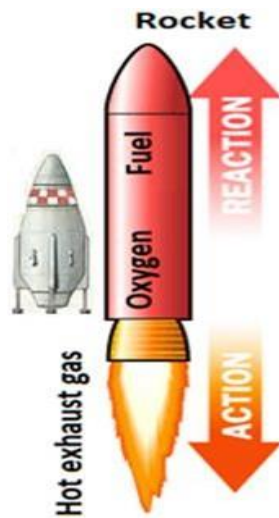
A. _____ (1)

B. _____ (1)

(2)

QUESTION 9

Study the picture below and answer the following questions



9.1 Choose the correct words to complete the paragraph:

Fuel	light	burns	travel
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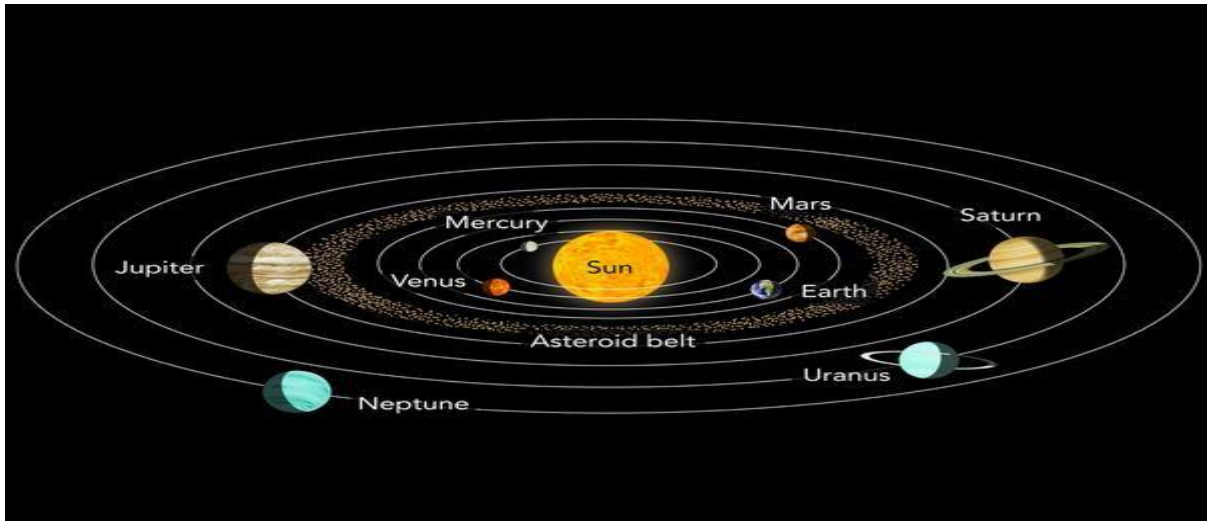
9.1.1. A rocket system gets the energy it needs from _____. (1]

9.1.2. The fuel _____ which releases hot gases (1)

(2)

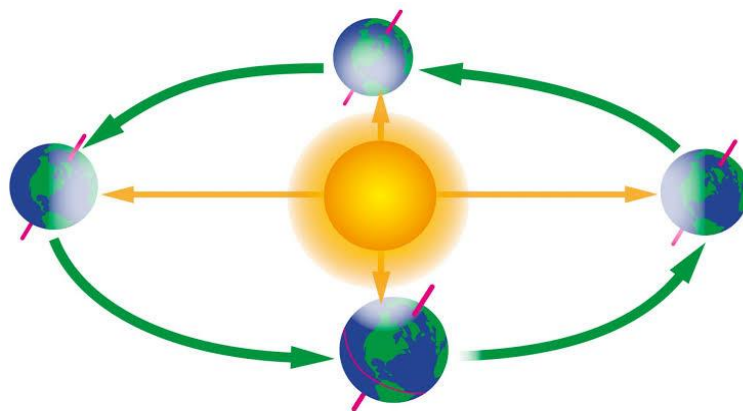
QUESTION 10

Look at the picture below and answer the questions below:



10.1. Which planet is the coldest planet in our solar system?

(1)



10.2 Look at the diagram above, explain on why is the Sun the only star that provides earth with heat and light energy?

(2)

(3)

TERM 3 TOTAL SECTION A: [18]

TERM 4 TOTAL SECTION B: [12]

GRAND TOTAL 30