

MEMO



TOM NEWBY SCHOOL EXAMINATION

Subject	NS/TECH		Examiner	MS M. MPESU		
Date	15 November 2017		Total marks	40		
Session	1		Duration	1 HOUR		
Grade	4		Moderator	MRS M. FOURIE		
Special instructions/		Read and answer ALL questions carefully.				
Equipment		Good Luck. Think before you INK!				
This assessment has been compiled using notes and information contained in the Tom Newby School resource material. The marking memorandum has been compiled accordingly. While alternative responses will be given due acknowledgement, the official memorandum will be considered a priority document to ensure uniformity of marking.						

Name:	Surname:	Class:

# $\frac{\text{QUESTION 1}}{\text{Read the following questions carefully and circle the correct answer.}}$

- 1. The main source of energy for all living things is
  - a. food
  - b. the sun ✓
  - c. light
  - d. heat
- 2. The transfer of energy from the sun to plant to people is called
  - a. Transfer
  - b. A chain
  - c. Food chain Y
  - d. Organism chain
- 3. Natural gas can be used
  - a. To eat
  - b. To transfer energy
  - c. To cook 🗸
  - d. To create fuels
- 4. Which of the following is a form of energy?
  - a. Fire
  - b. Touch
  - c. Sun 🗸
  - d. Sound
- 5. Fossil fuels come from
  - a. Petrol
  - b. Stored energy
  - c. Dead remains of plants and animals \*
  - d. Coal and oil



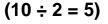
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- 6. Which of the following is not a source of heat?
  - a. Blanket Y
  - b. Stove
  - c. Fire
  - d. Candle
- 7. Which sense organ do you use to detect sound?
  - a. Eyes
  - b. Nose
  - c. Ears ✓
  - d. Mouth
- 8. Many musical instruments use \_\_\_\_\_ input energy to produce sound
  - a. Stored
  - b. Sound
  - c. Movement 🗸
  - d. Vibrations
- 9. Which of the following is an indigenous musical instrument?
  - a. A Triangle
  - b. Cello
  - c. Marimba 🗸
  - d. Trumpet
- 10. Sound cannot travel through
  - a. Water
  - b. Air
  - c. String
  - d. Vacuum 🗸

#### QUESTION 2 Answer <u>True</u> or <u>False</u>

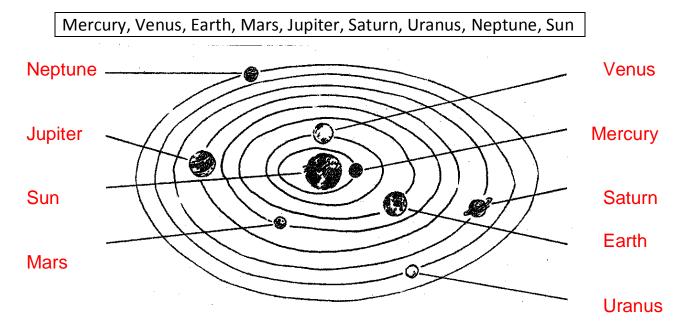
- 1. We can live without energy False <
- A food chain does not need the sun False
- 3. We can feel heat energy True ✓
- 4. Petrol is a fossil fuel True ✓
- 5. Vibrations cause sound True Y
- 6. Wood has stored energy True ✓
- Sound can travel without a medium False
- 8. Big vibrations make high pitch False <
- 9. Volume is how high or how low a sound is False <
- 10. Percussion musical instruments are played by blowing them False \*





#### QUESTION 3 The Sun

1. The list below shows names of planets in order from the sun. Use the information from the word box to label the diagram below. Label the sun too.



- Which object is a star?
  Sun ✓
- What is a Solar System?
  The sun and 8 planets orbiting around it ✓
- Explain why there is no life on Mercury Mercury is too close to the sun, there is too much heat ✓
- 5. Why is Earth the only planet with living things? It is at the right position not to close or too far from the sun ✓
- Explain the difference between rotate and orbit Rotate means turning around in one place, orbit means going around something ✓
- 7. Pluto is no longer called a planet on the Solar System. Give one reason why It is a dwarf planet/has no regular orbit around the Earth ✓

#### QUESTION 4 Planet Earth

Complete the sentences by matching Column A with Colum B at the bottom.

COLUMN A	COLUMN B
1. The Earth's shape is	A. The Earth has
2 mostly of rock	B. around the sun once a year
3. The Earth's surface is covered	C. The Earth is made
4 an atmosphere around it	D. like that of a ball
5. The Earth moves	E. with water and land
1. D 2. C 3. E	4. A 5. B

### Answer the following questions

- 6. Name 2 features of the Earth: Oceans/Planets, Mountains, Rivers ✓
- 7. The Earth is like a sphere. Why don't people fall off the Earth? The gravity pulls everything to the centre of the Earth ✓
- 8. A continent is a big piece of land like Africa. What is an Island? Piece of land surrounded by water ✓
- 9. The sun is a hot ball of burning gas. A planet is made of rock and water surrounded by Atmosphere ✓
- 10. Name 2 oceans found on Earth Indian/Atlantic/Pacific/Arctic <

## **QUESTION 5**

Explain the meaning of the following words/terms on the Rocket System.

- 1. Space What is found after the atmosphere 🗸
- 2. Launch to send a space craft into space ✓
- 3. Astronaut a person who travels in space Y
- Rocket a machine that travels in space ✓
- 5. Atmosphere area around the earth that has air Y

(10)

(5)

## **QUESTION 6**

#### <u>The Moon</u>

The following statements about the moon are not correct, write the correct ones under each sentence:

- 1. There are 3 phases of the moon. There are 8 phases of the moon. ✓
- 2. The moon takes 365¼ days to orbit the Earth. The moon takes 29¼ days to orbit the Earth. ✓
- 3. The moon produces light like the sun. The moon reflects light from the sun. ✓
- 4. The moon is shaped like a triangle. The moon is shaped like a Sphere/ball. ✓
- 5. No-one has ever been to the moon. There are people who have been to space. ✓

