



Memo



TOM NEWBY SCHOOL EXAMINATION

Subject	NS/TECH	Examiner	MS MPESU
Date	15 JUNE 2016	Total marks	40
Session	2	Duration	1 HOUR
Grade	4	Moderator	MRS FOURIE
Special instructions/ Equipment			

This NS/Tech Exam has been compiled using notes and information contained in the Tom Newby School book. 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. Up to 10% of the total mark allocation may be deducted for spelling and grammatical errors, except in the case of Language papers, where deductions are made according to a memorandum.

Name and Surname: _____ Grade: 4 _____

INSTRUCTIONS:



1. Read and answer all questions carefully!
2. Do not leave answers out

QUESTION 1:

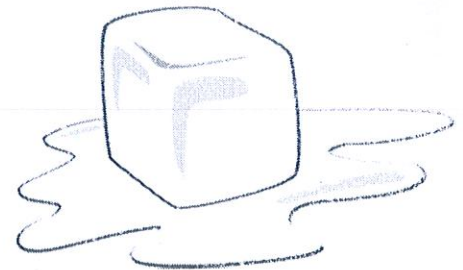
Choose one correct answer from the options provided and circle it:

1a) Everything on Earth is made up of....

- A) Water
- B) Living things
- C) Matter
- D) Material

1b) Examples of solid materials are....

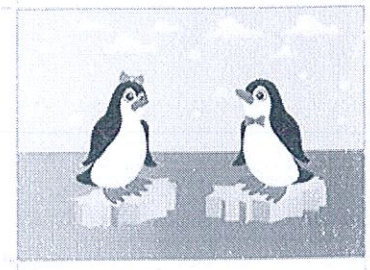
- A) Steam from a hot bath
- B) Water from rain
- C) Stones from the garden
- D) Noise from the radio



1c) A gas has no _____ and fills a space....

- A) Definite shape
- B) Different shapes
- C) Properties
- D) Mass

- 1d) If you put water into a freezer, it will....
- A) Melt
 - B) Solidify
 - C) Stay a liquid
 - D) Turn into gas

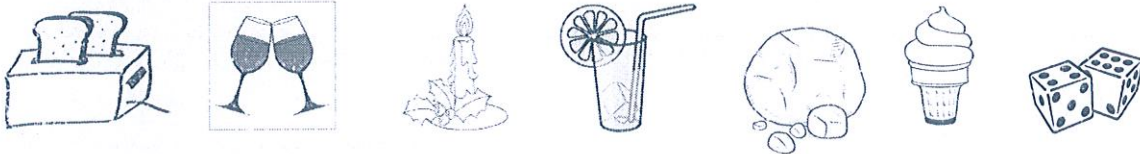


- 1e) What do we call the process when water changes from a liquid state to a state of gas....
- A) Condensation
 - B) Evaporation
 - C) Precipitation
 - D) Melting

(5)

QUESTION 2:

Look at the pictures of different substances below. Which one is solid, liquid or gas? Put a tick in the correct column.



2a)

Substance	Solid	Liquid	Gas
Water in a glass		✓	
Steam from the toast			✓
Glass full of juice		✓	
A stone	✓		
Candle flame			✓

(5)

2b) Explain the flowing changes in states of matter:

i) Melting From a solid to a liquidii) Solidifying from a liquid to a solidiii) Evaporation from a liquid to a gas

2c) Give an example of a substance that can be found in 3 states of matter.

water

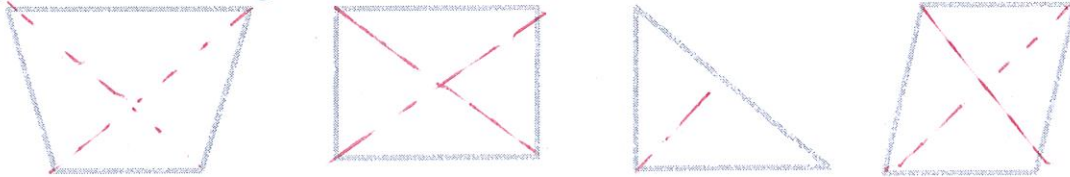
2d) Which state of matter does not take up definite space?

gas

(5)

QUESTION 3:

a) Look at the following shapes and draw, in the shapes, lines to show how you would strengthen them.



b) What is this form of strengthening called? Triangulation

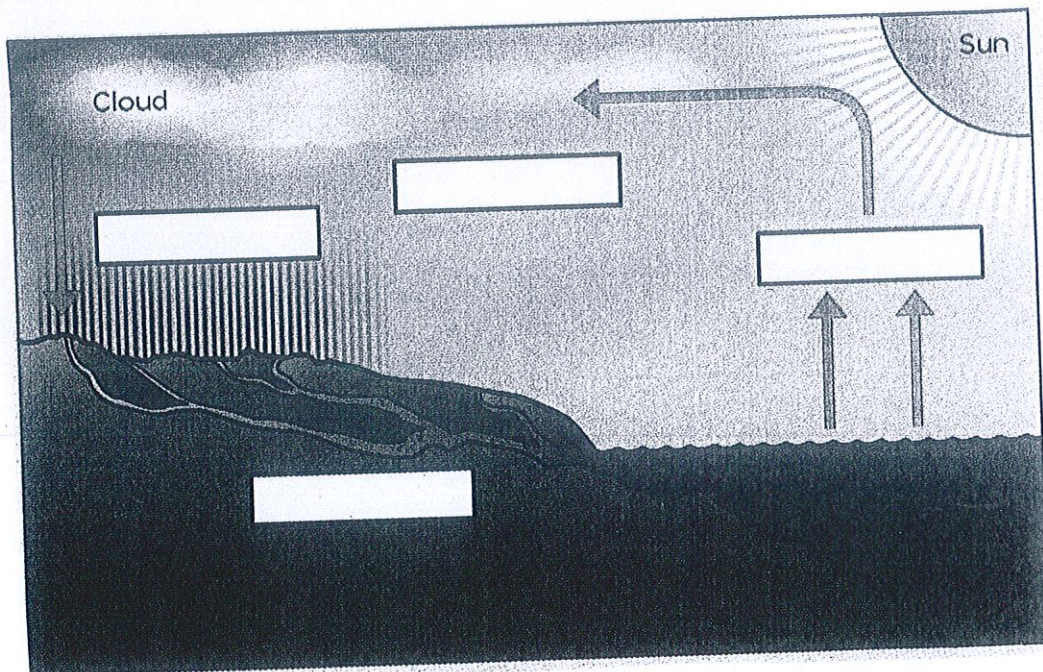
c) Write down the five steps of the Technology process:

- 1) Investigate
- 2) design
- 3) make
- 4) evaluate
- 5) communicate

(10)

QUESTION 4:

Study the picture of a water cycle below and answer the question that follow



- 4a) Where does the heat that makes water evaporate from rivers, lakes and dams come from?

The sun

(1)

- 4b) Where does the evaporated water go?

Into the atmosphere / into the sky

(1)

- 4c) What happens to the water vapour after it condenses?

Forms a cloud

(1)

- 4d) How does the water that evaporated get back to earth?

rain / hail / snow / precipitation

(1)

- 4e) Explain how hail or snow is formed

It gets very cold up in the atmosphere the water freezes.

(1)

(5)

QUESTION 5:

- a) Explain the difference between raw and manufactured materials and give one example for each

Raw material is material that has not been processed eg soil / leather / wood
 manufactured material is material that has been processed eg furniture, glass

(4)

- b) What is a shatterproof glass?

A glass that does not break easily

(1)

- c) Where do we find this kind of glass?

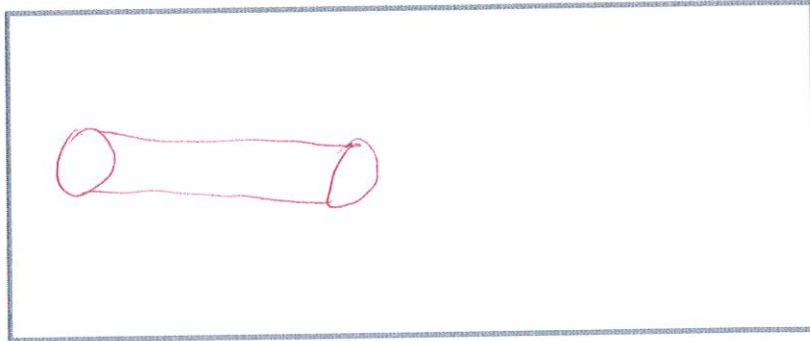
Sliding doors / some window screens

(1)

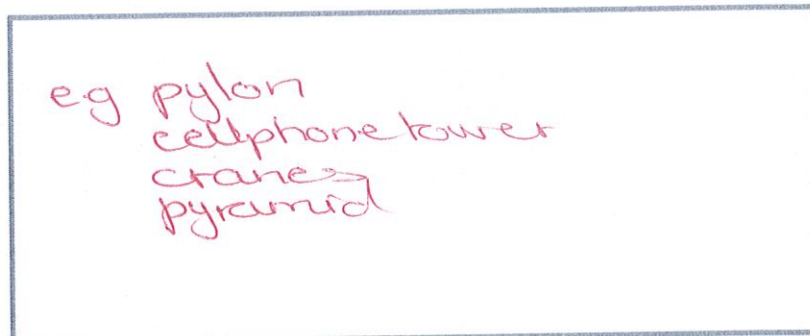
QUESTION 6:

Draw and label the following methods of strengthening structures.

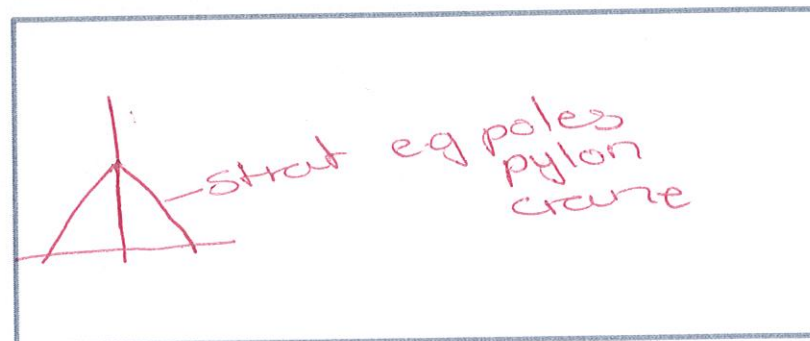
a) Tubing



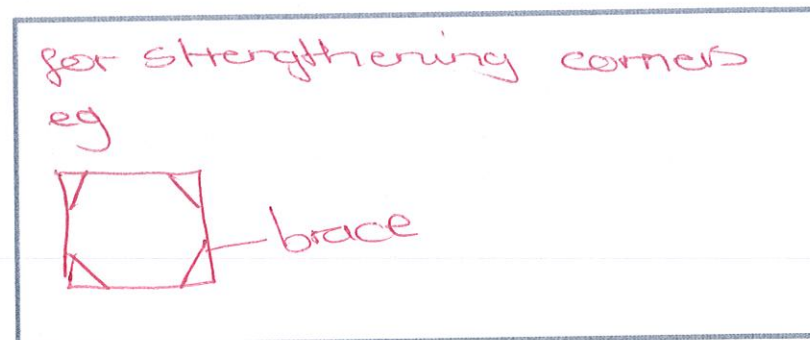
b) Triangulation



c) Strut



d) Brace



(4)