

**TOM NEWBY SCHOOL EXAMINATION**

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

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:**

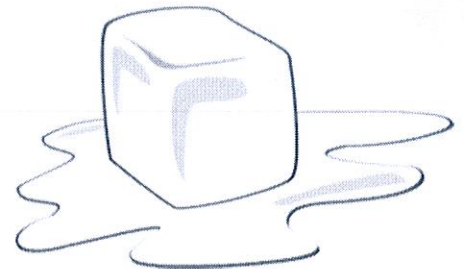
**Choose one correct answer from the options provided and circle it:**

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

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

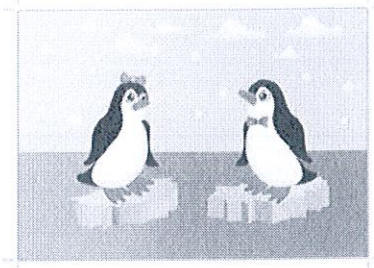
1b) Examples of solid materials are....

- 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



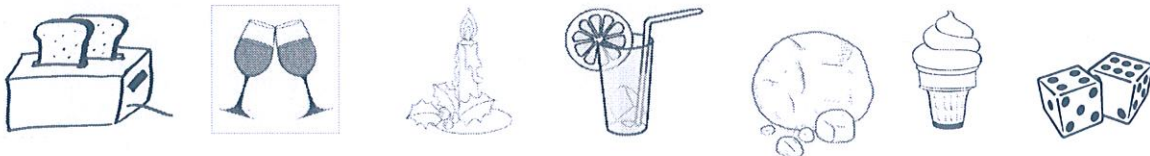
- 1d) If you put water into a freezer, it will....
- A) Melt
  - B) Solidify
  - C) Stay a liquid
  - D) Turn into gas

- 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			
Steam from the toast			
juice			
A stone			
Candle flame			

(5)

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

- i) Melting \_\_\_\_\_
- ii) Solidifying \_\_\_\_\_
- iii) Evaporation \_\_\_\_\_

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

\_\_\_\_\_

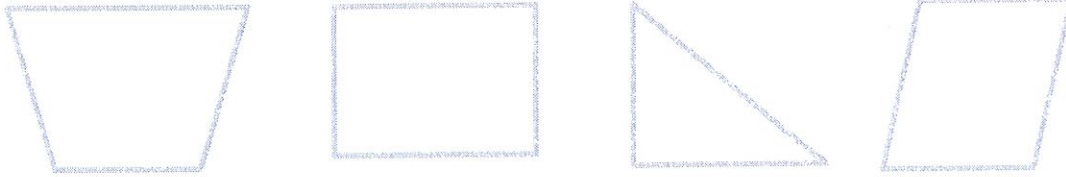
2d) Which state of matter does not take up definite space?

\_\_\_\_\_

(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? \_\_\_\_\_

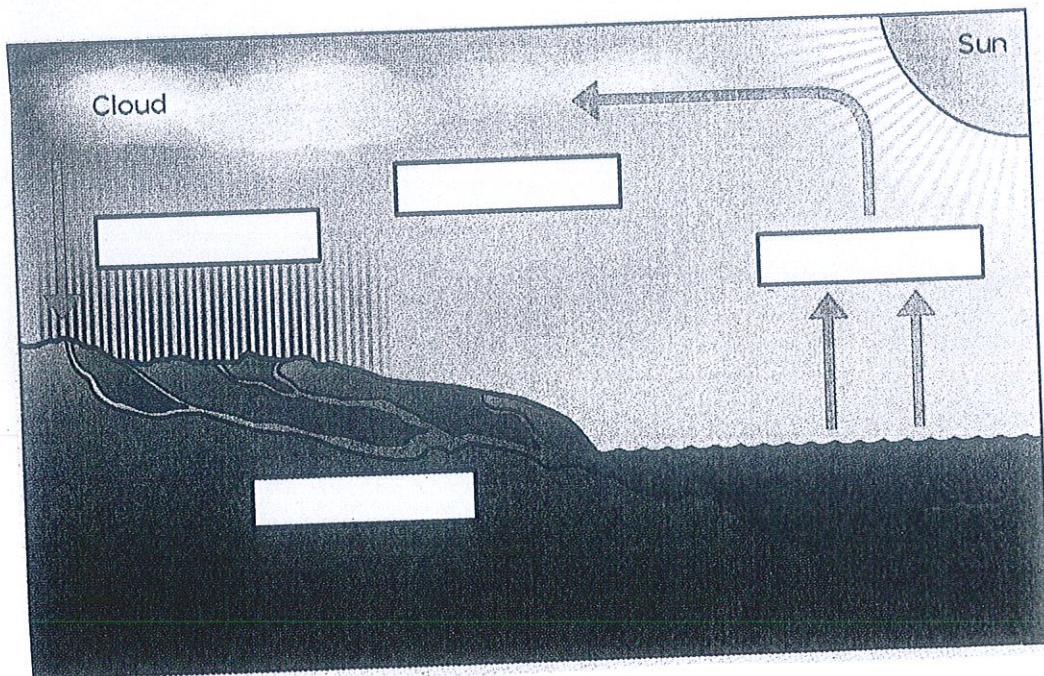
c) Write down the five steps of the Technology process:

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_

(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?

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(1)

4b) Where does the evaporated water go?

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(1)

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

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(1)

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

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(1)

4e) Explain how hail or snow is formed

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(1)

(5)

**QUESTION 5:**

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

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(4)

b) What is a shatterproof glass?

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(1)

c) Where do we find this kind of glass?

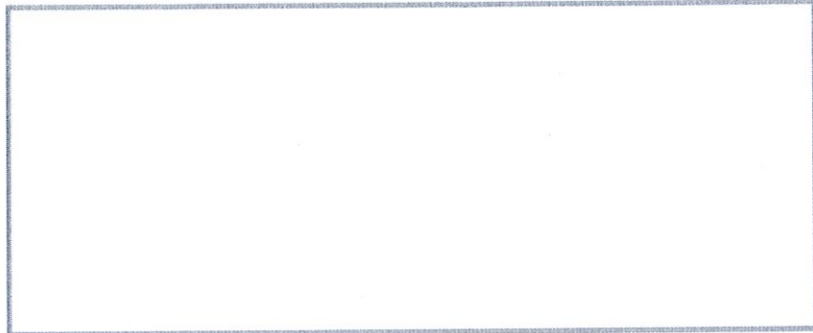
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(1)

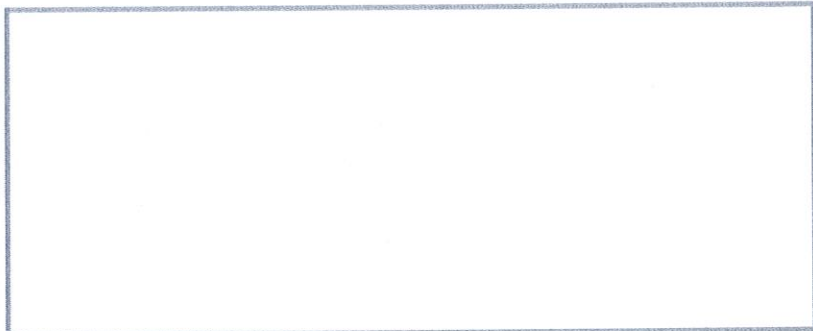
**QUESTION 6:**

Draw and label the following methods of strengthening structures.

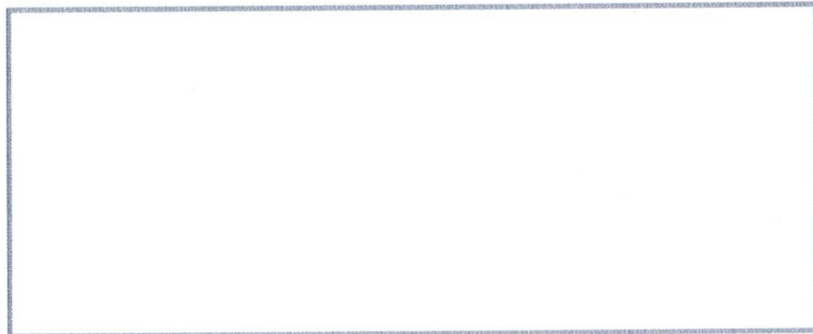
a) Tubing



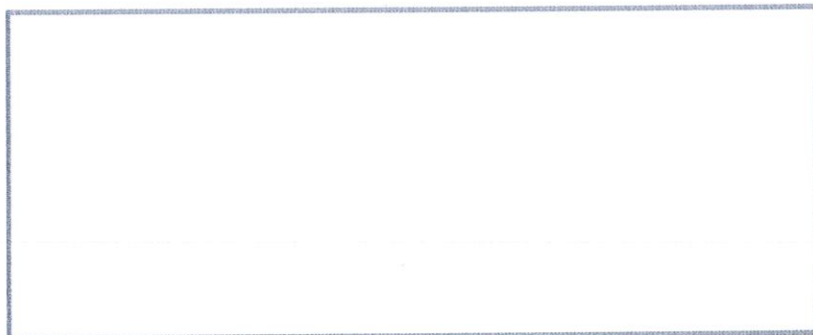
b) Triangulation



c) Strut



d) Brace



(4)

