



## TOM NEWBY SCHOOL EXAMINATION



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|   |  |                    |                                 |
|---|--|--------------------|---------------------------------|
| <b>Subject</b>  | <b>NS/TECH</b>   | <b>Examiner</b>    | <b>MS M. MPESU/ MS B. BOTHA</b> |
| <b>Date</b>   | <b>JUNE 2019</b>   | <b>Total marks</b> | <b>40</b>                       |
| <b>Grade</b>  | <b>4</b>   | <b>Duration</b>    | <b>1 HOUR</b>                   |
|   |  | <b>Moderator</b>   | <b>MRS M. FOURIE</b>            |
| <b>Special instructions/<br/>Equipment</b>  | <b>1. Read the instructions carefully</b><br><b>2. Write neatly</b><br><b>3. Take note of the mark allocation</b><br><b>4. Good luck</b> |                    |                                 |
| 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: |
|-------|----------|--------|

This paper consists of three sections: Section A (20 marks), Section B (14 marks) and Section C (6 marks). Answer all questions on the question paper.

### SECTION A (20)

#### **QUESTION 1** [5]

##### **Multiple choice questions**

**Circle the correct answer**

1.1 Which of the following is not considered a living thing:

- a) Locust
- b) Germs
- c) Bread
- d) Seeds

1.2 Which part of the plant makes food for the plant?

- a) Seed
- b) Leaf
- c) Root
- d) Stem

1.3 Which of the following animals uses its tail to warn attackers?

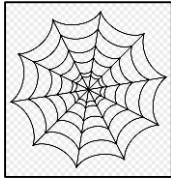
- a) Kangaroos
- b) Lizards
- c) Monkeys
- d) Rattlesnakes

1.4 A \_\_\_\_\_ is an aquatic habitat.

- a) Grassland
- b) Tundra
- c) Forest
- d) Marine

1.5 Which picture shows a structure that spans a gap?

a)



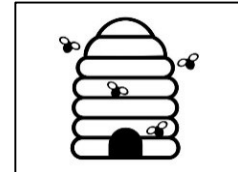
b)



c)



d)



### **QUESTION 2** [7]

Even though living things look different, they all carry out seven life processes. Name the seven (7) life processes:

2.1 \_\_\_\_\_

2.2 \_\_\_\_\_

2.3 \_\_\_\_\_

2.4 \_\_\_\_\_

2.5 \_\_\_\_\_

2.6 \_\_\_\_\_

2.7 \_\_\_\_\_

### **QUESTION 3** [5]

#### **Structure of an animal**

All animals have different parts that we call structures. Show and label the following on the diagram of a fish.

|          |               |      |      |      |
|----------|---------------|------|------|------|
| The Head | Sensory Organ | Limb | Body | Tail |
|----------|---------------|------|------|------|



**QUESTION 4** [3]

You have been asked to design a bridge to cross a river. Fill in the missing steps of the design process.

4.1 \_\_\_\_\_

Design

4.2 \_\_\_\_\_

Evaluate

4.3 \_\_\_\_\_

**SECTION B (14)****QUESTION 5** [5]

Match the words in Column A with their meanings in Column B. Write the letter next to the chosen number.

| Column A                  | Column B  |
|---------------------------|---|
| 5.1 Suitable              | A. The way a material is and how we describe it.    |
| 5.2 Material              | B. Something made by people.                        |
| 5.3 Property              | C. When something has the properties to do the job. |
| 5.4 Natural Material      | D. Something that comes from nature.                |
| 5.5 Manufactured Material | E. The substance we use to make products.           |

|     |     |     |     |     |
|-----|-----|-----|-----|-----|
| 5.1 | 5.2 | 5.3 | 5.4 | 5.5 |
|-----|-----|-----|-----|-----|

**QUESTION 6** [6]

Choose the correct word from the word box to complete the stages of the water cycle.

|              |     |           |     |      |        |
|--------------|-----|-----------|-----|------|--------|
| Water Vapour | Sun | Condenses | Gas | Rain | Freeze |
|--------------|-----|-----------|-----|------|--------|

The 6.1 \_\_\_\_\_ heats the water on Earth and changes it into 6.2 \_\_\_\_\_ that enters the air. The water droplets are now an invisible 6.3 \_\_\_\_\_. As the water vapour rises into the atmosphere, it becomes cooler until it 6.4 \_\_\_\_\_. This forms water droplets which pack together to form clouds. The large clouds become too heavy to stay in the air, they fall to earth as 6.5 \_\_\_\_\_. Sometimes, the water droplets become so cold that they 6.6 \_\_\_\_\_ and fall on earth as snow or hail.

**QUESTION 7 [3]**

Give an example for each of the following forms of matter:

7.1 Solid \_\_\_\_\_

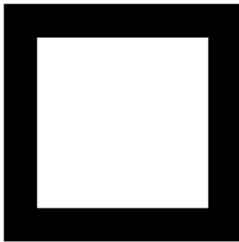
7.2 Liquid \_\_\_\_\_

7.3 Gas \_\_\_\_\_

**SECTION C (6)****QUESTION 8 [6]**

Study the pictures below and answer the questions that follow:

A)



B)



8.1 Name 3 strong structures that make use of triangulation for their strengthening. (3)

a) \_\_\_\_\_ b) \_\_\_\_\_ and c) \_\_\_\_\_

8.2 Which one of the shapes above is stable and more rigid? (1)

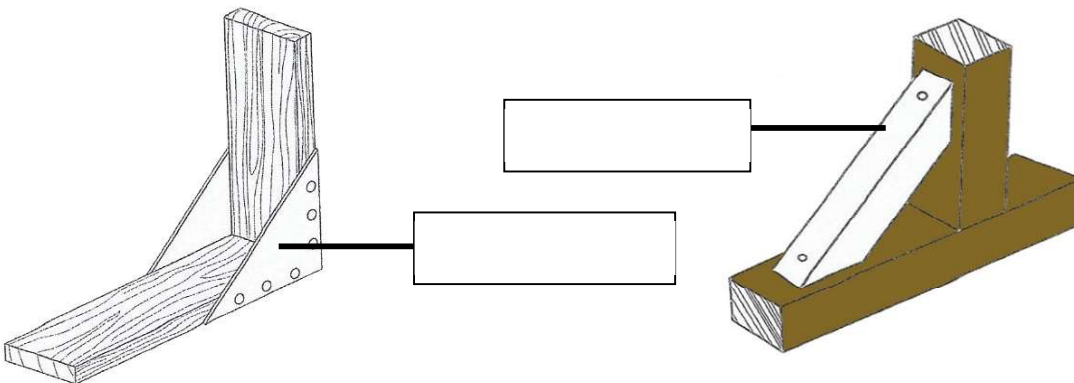
\_\_\_\_\_

8.3 Explain why the joints in structures need to be strengthened? (1)

\_\_\_\_\_

\_\_\_\_\_

8.4 What method of strengthening corners has been used in each of the following diagrams of corner joints? (2)



**Grade 4 NS Tech Exam June 2019**  
**Performance Analysis**  
 (For teacher use only)

**Name and Surname:** \_\_\_\_\_ **Class:** \_\_\_\_\_

|                 | <b>Section A</b> |   |   |   |
|-----------------|------------------|---|---|---|
| Question number | 1                | 2 | 3 | 4 |
| Possible Mark   | 5                | 7 | 5 | 3 |
| Learner Mark    |                  |   |   |   |

|                 | <b>Section B</b> |   |   |
|-----------------|------------------|---|---|
| Question number | 5                | 6 | 7 |
| Possible Mark   | 5                | 6 | 3 |
| Learner Mark    |                  |   |   |

|                 | <b>Section C</b> |
|-----------------|------------------|
| Question number | 8                |
| Possible Mark   | 6                |
| Learner Mark    |                  |