



TOM NEWBY SCHOOL
TERM 2 CONTROLLED TEST

Subject	NATURAL SCIENCE AND TECHNOLOGY	Examiner	MRS GROVES
Date	JUNE 2024	Total marks	40
Grade	5	Duration	1 HOUR
		Moderator	MRS M. FOURIE
Special instructions/ Equipment	Answer on the question paper.		
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 and surname: _____ **Class: 5** _____

40

SECTION A –QUESTION 1 – TRUE AND FALSE [5]

State whether the following statements are true or FALSE

1.1 Ore is a type of rock that contains minerals and metals. (1)

1.2 Properties are qualities or characteristics of matter and materials. (1)

1.3 Something is considered malleable if it tarnishes easily. (1)

1.4 Ductile refers to metals that conduct heat easily. (1)

1.5 Rust is the reddish-brown layer formed when iron reacts with air and water. (1)

QUESTION 2 –MISSING WORD [5]

Complete the following sentences by writing the correct word. Choose your answers from the word box provided.

copper, aluminium, conducts, alloy, plated, brittle, ceramic, plastic, gold

2.1 _____ is a strong metal that is used in the construction of aircraft because it weighs less than other metals. (1)

2.2 An _____ is a mixture of two or more metals, or a combination of a metal with non-metals. (1)

2.3 _____ objects are made from clay or sand. (1)

2.4 _____ is a valuable and expensive metal and never tarnishes or becomes dull. (1)

2.5 Objects are referred to as _____ when they easily break into pieces upon falling. (1)

QUESTION 3 - MATCH THE COLUMNS [5]

Match column A with column B. Write the letter of the answer you have selected in the space provided on the answer grid.

	A	B
3.1	Recycle	A. Can be man-made or natural
3.2	Glass	B. Synthetic polymers that are usually waterproof and lightweight.
3.3	Plastic	C. Materials that allow heat to pass through them easily.
3.4	Fibres	D. Is made from liquid sand.
3.5	Conductor	E. The process of reusing old material to make new objects

3.1	_____	3.2	_____	3.3	_____	3.4	_____	3.5	_____
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QUESTION 4 – MULTIPLE CHOICE [5]

Select the correct answer and circle the corresponding letter.

4.1 An ancient metal that has been used for over 8000 years. (1)

- a. Iron
- b. Silver
- c. Brass

4.2 Steel is ... (1)

- a. Magnetic
- b. Non-magnetic
- c. Brittle

4.3 Tarnish means... (1)

- a. Heat easily.
- b. Conduct electricity easily.
- c. Corrode and become dull.

4.4 Rust can be stopped by... (1)

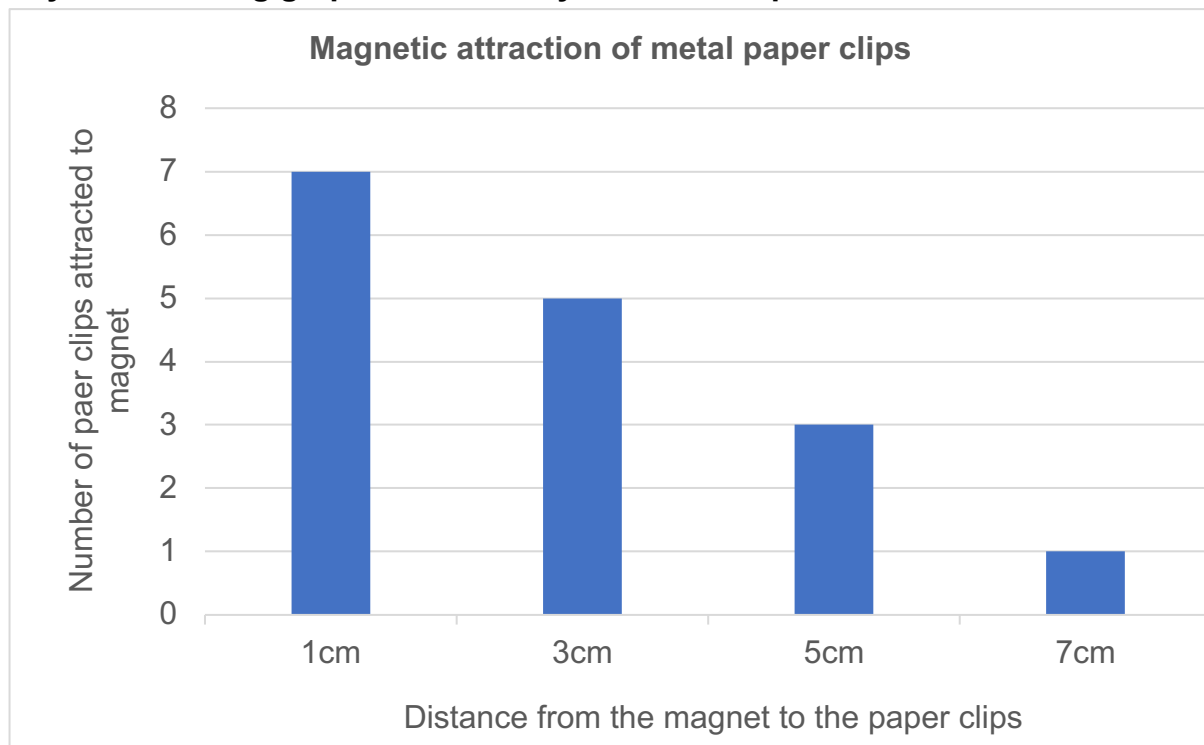
- a. Boiling it
- b. Coat it with oil or grease.
- c. Cleaning it with bleach

4.5 Copper... (1)

- a. Is a very light metal.
- b. Does not corrode.
- c. Conducts electricity very well.

SECTION B- MATTER AND MATERIALS**QUESTION 5 –ANALYSING AND EVALUATING [6]**

Study the following graph and carefully answer the questions that follow:



5.1 What property of metals is being observed in the graph? (1)

5.2 What metal was used in this experiment? (1)

5.3 At what distance are the most paper clips attracted to the magnet? (1)

5.4 How many paper clips were attracted at 3cm? (1)

5.5 What do you predict happens when the magnet is moved closer to the paper clips? Why do you think this may occur? (2)

QUESTION 6 – CASE STUDY [14]

Read the case study that describes how cheese is processed. Complete the activities as required.

FROM MILK TO CHEESE

Imagine you are a cheese maker, and your task is to turn fresh milk into delicious cheese. Let's follow the exciting journey from the farm to the cheese plate.

6.1 Milking the cows (2)

Begin with the cows on the farm. Explain how farmers milk the cows and why it's important to have clean and healthy cows.

6.2 Collecting the milk (2)

After milking the cows, it is essential to collect the fresh milk and place it in clean, airtight containers. Explain why this step is important.

6.3 Heating and adding rennet. (*Rennet is a something used to thicken the milk.*) (2)

The milk is heated, and rennet is added. Explain what heating does to the milk and why rennet is important in making cheese.

6.4 Curdling and cutting (*Curdling is the thickening of milk.*) (1)

After adding rennet, the milk begins to thicken or curdle, and it is then cut into small pieces. Why is it important for the milk to thicken or curdle in the cheese-making process?

6.5 Draining Whey (*Whey is the liquid part of the mixture.*) (2)

Once the milk is cut, the liquid part (whey) is separated.

Underline the correct word in brackets:

6.5.1 (Cheese, cream) forms once the liquid is removed.

6.5.2 This helps the cheese to (liquify, solidify).

6.6 Pressing (2)

The remaining curd is pressed into moulds to shape the cheese. List 2 common cheese shapes found in supermarkets or at home.

6.7 Aging (3)

The shaped cheese is left to age for some time. The aging process affects the flavour of the cheese. List three meals that include cheese.

TOTAL: 40

Performance Analysis
Grade 5 NSTech
Term 2 Formal Assessment
Performance Analysis June 2024
(For teacher use only)

Name and Surname: _____ **Class:** _____

Question	Q1	Q2	Q3	Q4	Q5	Q6	TOTAL
Possible Mark	5	5	5	5	6	14	40
Learner Mark							
Moderated Mark							