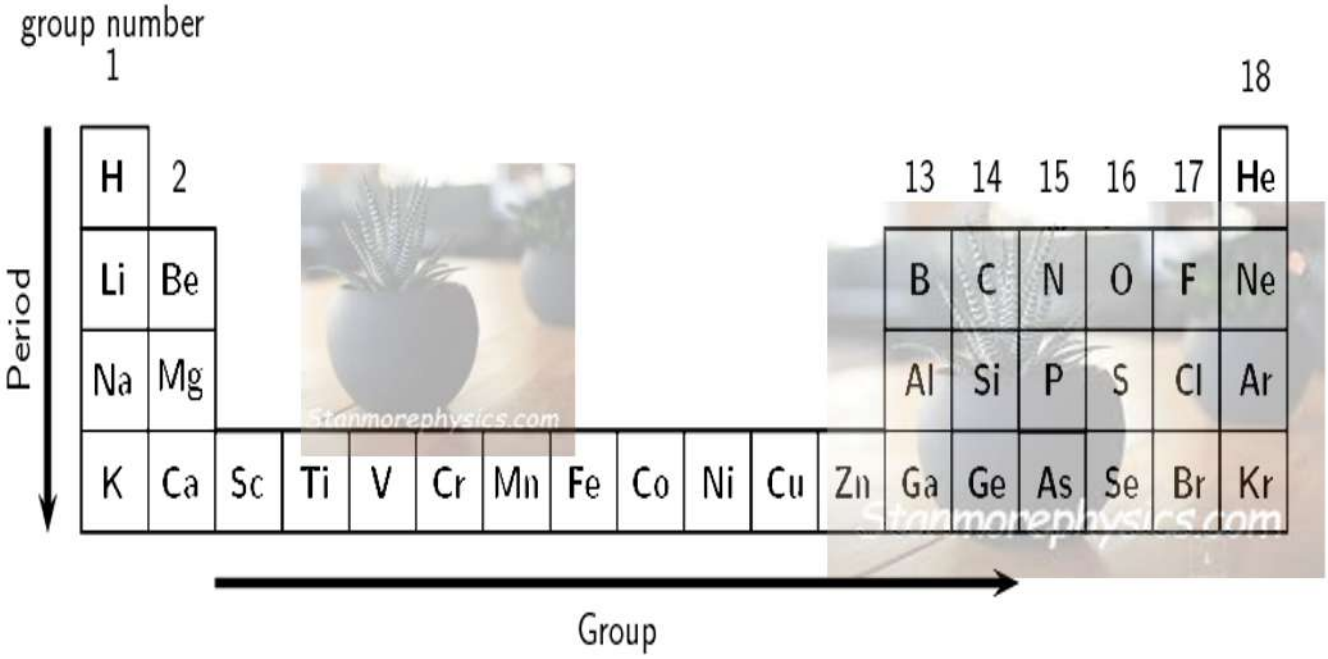
KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

NATURAL SCIENCES GRADE 8
TERM 2 TOPIC TEST NO. 1
Topic: Periodic Table
Marks: 20 **Time:** 20 minutes

Question 1

A section of the Periodic Table is given below:



1.1 Define the term Element (1)

1.2 How are the elements arranged on the periodic table? (1)

1.3 Wite the names or symbols of the following elements:

1.3.1 The element in Group 15, Period 2 (1)

1.3.2 A non-metal in group 1 (1)

1.3.3 A semi-metal in group 13 (1)

1.3.4 A noble gas In period 2 (1)

1.3.5 The name of the element with the symbol 'Na' (1)

1.4 TWO elements that are liquids at room temperature (2)

1.5 TWO elements that are found in the molecules of water (H_2O) (1)

[10]

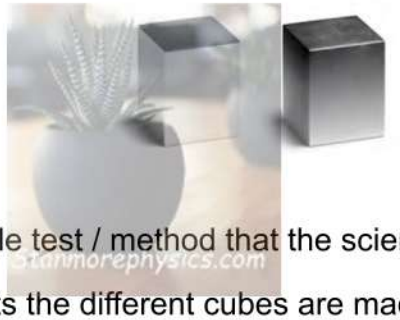
Question 2

2.1 Complete the table below by stating YES or NO when comparing the properties of the elements given. Only write down the question number and YES or NO.

PROPERTY	Aluminium	Silicone
Electrical conductor	2.1.1	2.1.2
Brittle	2.1.3	YES
High melting point	2.1.4	NO

(4)

Two almost identical unmarked metal cubes are found in a science lab.



2.2 Describe a possible test / method that the scientist can use to find out which elements the different cubes are made of. (2)

2.3 An Atomic mass of an element is calculated by adding the number of protons and number of neutrons of the atom.

Using the formular atomic mass = No. of protons + No. of neutrons, calculate the number of neutrons of Fluorine (F). (4)

[10]

Total Marks: 20

KWAZULU-NATAL PROVINCE
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REPUBLIC OF SOUTH AFRICA

NATURAL SCIENCES GRADE 8
TERM 2 TOPIC TEST NO. 1 MEMORANDUM
Topic: Periodic Table
Marks: 20 **Time:** 20 minutes

Question 1

1.1 Pure substance that has only one kind of atom. ✓ (1)

1.2 Elements are arranged according to atomic number (or number of protons) ✓ (1)

1.3

1.3.1 Nitrogen / N ✓ (1)

1.3.2 Hydrogen / H ✓ (1)

1.3.3 Boron / B ✓ (1)

1.3.4 Neon / Ne ✓ (1)

1.3.5 Sodium ✓ (1)

1.4 mercury (Hg) ✓ and Bromine (Br) ✓ (2)

1.5 Hydrogen (H) and Oxygen (O) ✓ (1)

[10]

Question 2

2.1.1 YES ✓ (1)

2.1.2 YES ✓ (1)

2.1.3 NO ✓ (1)

2.1.4 YES ✓ (1)

2.2 Accept any ONE relevant answer, e.g.:

- Identify the elements by establishing the different melting / boiling points of the cubes.
- Testing the hardness of each cube.
- Testing to see whether the cubes are magnetic or not.
- Comparing the densities of each cube by measuring their masses. ✓✓ (2)

2.3 No. of Neutrons= 19✓ – ✓9✓ =10✓ (4)

[10]

Total Marks: 20