

NATURAL SCIENCES

GRADE 8

TOPIC: Periodic Table and Atoms

INFORMAL TEST 2.1

MARKS: 15

Name and Surname: _____ Gr. 8 _____ Date: _____

SECTION A

QUESTION 1

1.1 Match the description in COLUMN A with the correct term in COLUMN B. Write only the LETTER (A - E) next to the question number (1.1.1 – 1.1.3) in the open spaces provided below.

COLUMN A		COLUMN B	
1.1.1	The tiny particles that make up all matter.	A	Neutron
1.1.2	A horizontal row in the Periodic Table of elements.	B	Group
1.1.3	A sub-atomic particle of matter that is uncharged / electrically neutral.	C	Protons
		D	Atoms
		E	Period

ANSWERS:

1.1.1 _____ 1.1.2 _____ 1.1.3 _____ (3)

1.2 Give the correct word OR term for each of the following statements.

1.2.1 Contains all the protons and neutrons in an atom.

Answer: _____ (1)

1.2.2 An element that is shiny and conducts electricity.

Answer: _____ (1)
[5]

SECTION B

QUESTION 2

The Periodic Table below shows elements 1 to 20, arranged according to the number of protons in the nucleus.

¹ H																			² He
³ Li	⁴ Be																		
¹¹ Na	¹² Mg																		
¹⁹ K	²⁰ Ca																		

2.1 Give the NAME of each of the following elements:

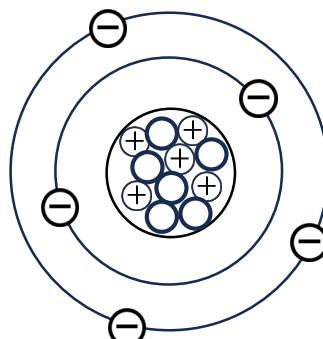
(a) Ca Answer: _____ (1)

(b) Element 12. Answer: _____ (1)

(c) The element with 13 protons in the nucleus. Answer: _____ (1)

2.2 Give the SYMBOL for the element silicon. **Answer:** _____ (1)

2.3 Study an atom of the element BORON below and use it to answer the questions:



2.3.1 Explain why boron is element number 5 on the Periodic Table.

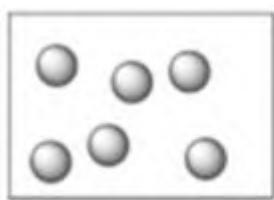
_____ (1)

2.3.2 How many neutrons does this atom of boron have? _____ (1)

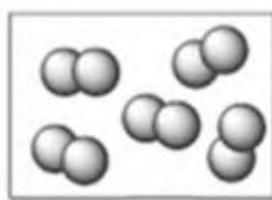
2.3.3 Give a reason why this atom is electrically neutral.

_____ (1)

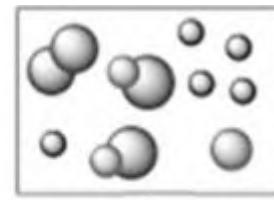
2.4 Consider the diagrams of three different substances



X



Y



Z

2.4.1 Identify each of the following:

(Only write down X, Y OR Z on the line next to each of the following questions)

(a) A diatomic substance

Answer: _____ (1)

(b) A mixture

Answer: _____ (1)

2.4.2 The number of Oxygen atoms in Y?

Answer: _____ (1)
[10]



TOTAL MARKS: 15

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QUESTION 1

1.1.1 D ✓

1.1.2 E ✓

1.1.3 A ✓

1.2.1 Nucleus ✓

1.2.2 Metal ✓

[5]

MEMORANDUM

SECTION A

SECTION B

QUESTION 2

2.1 (a) Calcium ✓
 (b) Magnesium ✓
 (c) Aluminium ✓ (3)

2.2 Si ✓ (1)

2.3.1 Boron/B has 5 protons✓ in the nucleus. (1)

2.3.2 6 ✓ (1)

2.3.3 It has an equal number of protons (+particles) and electrons (-particles). ✓

OR

It has 5 protons and 5 electrons.✓

(1)

2.4.1 (a) Y✓ (1)

2.4.1 (b) Z✓ (1)

2.4.2 10✓ (1)

[10]

15



TOTAL MARKS: