

NATURAL SCIENCES GRADE 8
TERM 2 TOPIC TEST NO. 2

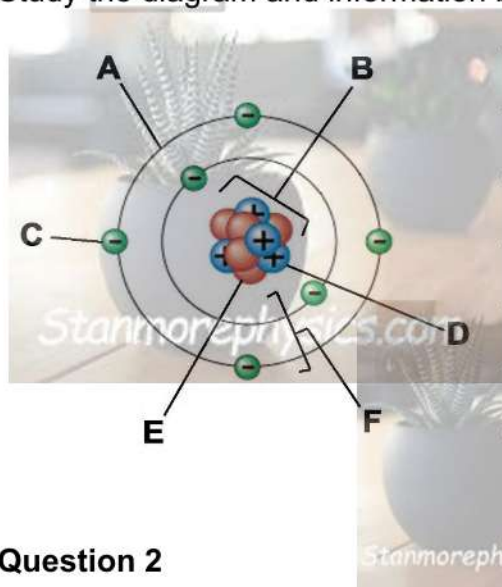
Topic: Atoms

Marks: 20

Time: 20 minutes

Question 1

Study the diagram and information box of the element 'C' and answer the questions that follow:



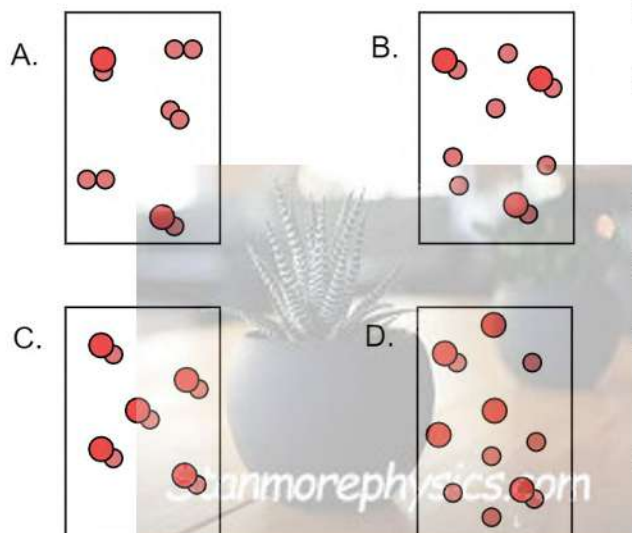
- 1.1 Define an *atom*. (2)
- 1.2 Label the parts B, C, D and E. (4)
- 1.3 What is the atomic number of this atom? (1)
- 1.4 What does the atomic number represent? (1)
- 1.5 What is the name of this element? (1)
- 1.6 How many neutrons does this atom have? (1)
- 1.7 When is an atom considered neutral? (1)

6
C
12.011

[11]

Question 2

Study the diagram below and answer the questions that follow:



- 2.1 Define a *pure substance*. (2)
- 2.2 State whether the following is an element, compound or a mixture:
 - 2.2.1 A (1)
 - 2.2.2 C (1)
- 2.3 Which letter contains diatomic molecules? (1)
- 2.4 Explain why tap water is considered a mixture, but water vapour considered a pure substance. (2)

- 2.5 Letter B contains substances in liquid form only. Explain how you would be able to separate the two liquids. (2)

[9]

Total Marks: 20



**NATURAL SCIENCES GRADE 8
TERM 2 TOPIC TEST NO. 2 MEMORANDUM**

Topic: Atoms

Marks: 20

Time: 20 minutes

Question 1

- 1.1 An atom is a single unit ✓ of an element. ✓ (2)
- 1.2 B – Nucleus ✓ (1)
- C – Electron ✓ (1)
- D – Proton ✓ (1)
- E – Neutron ✓ (1)
- 1.3 6 ✓ (1)
- 1.4. Number of protons ✓ (1)
- 1.5 Carbon ✓ (1)
- 1.6 6 ✓ (1)
- 1.7 When there are equal amounts of protons and electrons. ✓ (1)

[11]

Question 2

- 2.1 A substance in which all the particles ✓ are identical. ✓ (2)
- 2.2
- 2.2.1 Mixture ✓ (1)
- 2.2.2 Compound ✓ (1)
- 2.3 A ✓ (1)
- 2.4 Tap water contains different particles that are mixed together. ✓
- Water vapour contains only one type of particle. ✓ (2)
- 2.5 Distillation is used due to the particles having different boiling points. ✓ Boil the liquids and collect the vapour of the first substance that boils, leaving the second substance behind. ✓ (2)

[9]

Total Marks: 20