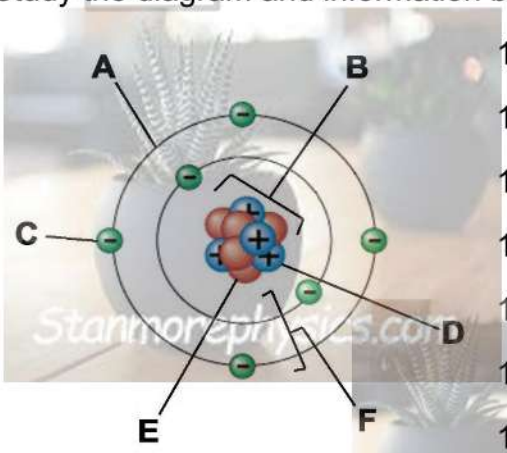
Downloaded from Stanmorephysics.com

KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

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:



6
C
12.011

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)

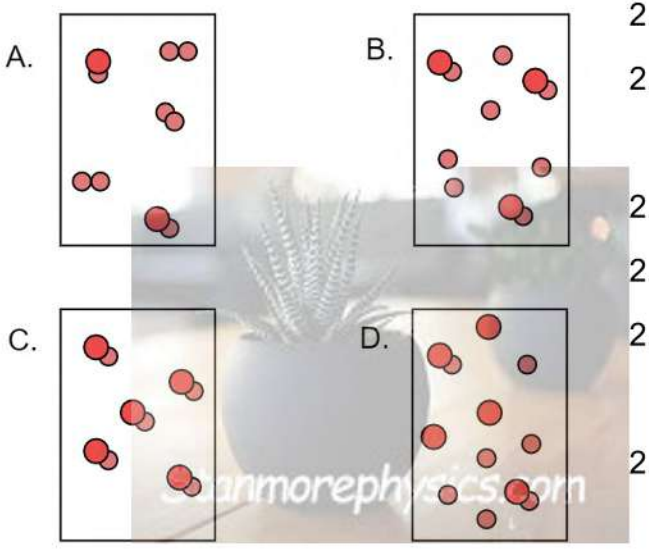
1.6 How many neutrons does this atom have? (1)

1.7 When is an atom considered neutral? (1)

[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

Downloaded from Stanmorephysics.com

KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

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