

NAME.....CLASS.....

WANYANGE GIRLS' SECONDARY SCHOOL

S.4 CHEM

ATTEMPT ALL QUESTIONS

1. a) Differentiate between covalent and ionic bonding

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b) State the type of bonding that occurs in each of the following substances and draw diagrams to show the type of bonding you have mentioned:

i) Chlorine molecule

ii) Water molecule

lii) Calcium chloride

iv) Sodium metal

2. An element M has 15 protons and mass number of 31. Write the;

- i) Atomic number of M.....
- ii) Mass number of M.....
- iii) Electron configuration of M.....
- iv) valency of M.....
- v) Period to which M belongs.....
- vi) Group to which M belongs.....
- vii) Formula of the oxide of M.....

3. An oxide of element X contains 70% of X. Calculate the formula of the oxide
(X= 56, O=16)

4) 10g of calcium carbonate were strongly heated in a test tube. Calculate :

a) the mass of residue left in the test tube

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b) the volume of gaseous product evolved at room temperature
(one mole of a gas occupies 24 dm³ at room temperature)

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