

Name: _____

Block: _____

Date: _____

Chemistry 11

Percentage Composition

Assignment

1. Calculate the percentage composition of the following:

a. FeCl_2 (3 marks)

b. CaCO_3 (4 marks)

c. $(\text{NH}_4)_3\text{PO}_4$ (5 marks)

2. Calculate the percentage composition of the **bold** species in each of the following:

a. $\text{CaCl}_2 \cdot \mathbf{2H_2O}$ (2 marks)

b. $\text{Ce}_2(\text{C}_2\text{O}_4)_3 \cdot \mathbf{9H_2O}$ (2 marks)

c. $\text{Cu}(\mathbf{C_2H_3O_2})_2 \cdot 2\text{NH}_3$ (2 marks)

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Chemistry 11

Empirical Formulae

Assignment

Given the percentage composition, find the simplest formula for each of the following substances.

1. 88.8% Copper ; 11.2% Oxygen
2. 40.0% Carbon ; 6.67% Hydrogen ; 53.33% Oxygen
3. 92.3% Carbon ; 7.7% Hydrogen
4. 70.0% Iron ; 30.0% Oxygen
5. 5.88% Hydrogen ; 94.12% Oxygen
6. 79.90% Copper ; 20.10% Oxygen
7. 56.4% Potassium ; 8.7% Carbon ; 34.9% Oxygen
8. 10.04% Carbon ; 0.84% hydrogen ; 89.12% Chlorine
9. 42.50% Chromium ; 57.50% chlorine
10. 15.8% Carbon ; 84.2% Sulphur
11. 12.5% Hydrogen ; 37.5 % Carbon ; 50.0% Oxygen
12. 29.40% Calcium ; 23.56% Sulphur ; 47.04% Oxygen
13. 52.94% Aluminum ; 47.06% Oxygen
14. 72.40% Iron ; 27.60% Oxygen
15. 34.6% Gallium ; 17.8% Carbon ; 47.6% Oxygen