Physical Science

Name: _____
Date: _____
Period: _____

Molecular Mass and Percent Composition Worksheet

Find the molecular mass of each of the following to three decimal places.

ex: H_20

H = 2(1.008) = 2.016
O = 1(15.999) = 15.999
H_2O = 2.016 + 15.999 = 18.015

1. CO
2. CO_2
3. $CeBr_3$
4. H_2SO_4
5. $CuSO_4$
6. HCO_3
7. $MgSO_4$
8. $C_6H_{12}O_6$
9. C_2H_3O
10. C_2H_5OH

Determine the percent composition of each element in the following compounds. Express answers to two decimal places.

ex: SO_2

S = 1(32.066) = 32.066
O = 2(15.999) = 31.998
SO_2 = 32.066 + 31.998 = 64.064

mass % S = mass S/mass SO_2 X 100; 32.066/64.064 X 100 = 50.053% = 50.05%
mass % O = mass O/mass SO_2 X 100; 31.998/64.064 X 100 = 49.946 % = 49.95%

11. CO_2

12. CH_2O

13. H_2SO_4

14. $CuSO_4$

15. $CHCl_3$

16. $C_{12}H_{22}O_{11}$

17. $C_{14}H_{20}N_2SO_4$