

**Chemistry  
Worksheet  
Moles**

**Do not write on this paper.**

**Calculate the number of molecules for each compound.**

1. 4.2 moles of Glucose
2. 3.6 moles of Ethanol
3. 2.7 moles of Benzene
4. 5.8 moles of HCl
5. 8.3 moles of NaOH

**Calculate the number of moles for each compound.**

6.  $2.78 \times 10^{21}$  molecules of Benzene
7.  $4.32 \times 10^{24}$  molecules of HCl
8.  $7.83 \times 10^{20}$  molecules of Water
9.  $9.14 \times 10^{19}$  molecules of Propanol
10.  $1.62 \times 10^{22}$  molecules of Sucrose

**Calculate the molar mass for each compound.**

11. Butane
12. Water
13. Sodium Hydroxide
14. Hydrochloric Acid
15. Benzene

**Calculate the number of grams for each compound.**

16. 3.8 moles of NaOH
17. 1.7 moles of  $C_6H_{12}O_6$
18. 9.8 moles of CaNCN
19. 2.7 moles of  $MnCl_2$
20. 6.3 moles of  $P_4O_{10}$

**Calculate the number of moles for each compound.**

21. 115g of NaCN
22. 87g of  $NaAu(CN)_2$
23. 125g of  $Zn(OH)_2$
24. 1234g of  $ZrI_4$
25. 20g of  $NH_3$

**Calculate the percent composition of each element.**

26. O in  $H_2O$
27. C in Pentane
28. Na in Sodium Hydroxide
29. F in  $CCl_2F_2$
30. K in  $K_2CrO_4$