

**Chemistry**  
**Class-9**  
**Chapter-6**  
**Concept of Mole and Chemical counting**  
**Subject teacher- Syeeda Sultana**  
**Work sheet -5**  
**Date-20.09.2020**

**Exercise:**

**Write down the answers** of the following questions on your copy.

**Questions:**

1. In a compound of carbon and hydrogen, carbon is 92.31%. Determine the empirical formula & molecular formula of that compound. The molecular mass of the compound is 78.
2. In an organic acid there are C=26.7%, H=2.24% and O=71.06%. If the vapor density of the compound is 45, what will be the molecular formula and empirical formula of that compound? [ Hints: Molecular mass= 2 × vapor density]
3. In a compound 'X' there are C=52.17%, H=13.04% and O=34.78%. The molecular mass of the compound is 46. Determine the molecular formula of compound 'X'.
4. By analyzing 20 g of compound 'A', 0.226 g hydrogen, 7.19 g sulphur and 12.584 g oxygen obtained. The molecular mass of the compound is 178. Determine the molecular formula of the compound 'A'.