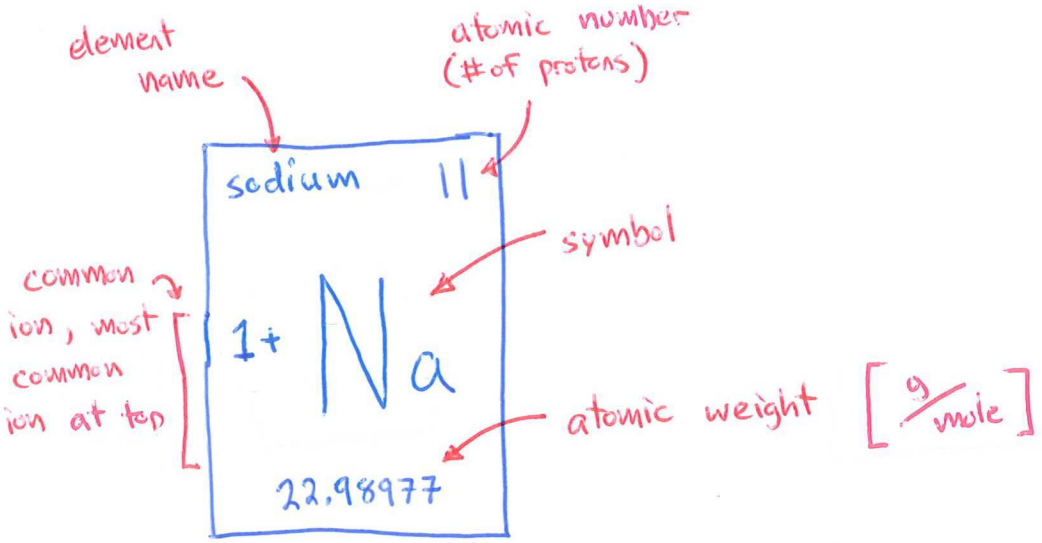
Formula Weight (FW)



- atomic weight is for a single element [g/mole]
  if multiple (N_2, O_2, ...) multiple by subscript.

- Formula weight (FW) or Molecular weight is for a compound ($NaCl$, H_2O, $MgSO_4$, ...) add [g/mole] all atomic weights.

atomic weights of compound parts

$$FW = \sum \text{atomic weights}_i$$

examples:

molecular weight of H

molecular weight of O

$$FW_{H_2O} = (2)(1.0079) + (15.9994) = 18.0152 \text{ g/mole}$$

$$FW_{NaCl} = (22.9898) + (35.453) = 58.4428 \text{ g/mole}$$

$$FW_{MgSO_4} = (24.305) + (32.065) + (4)(15.9994) = 120.3676 \text{ g/mole}$$