3. Zn(s) + HCl(aq) 🡪 ZnCl2(aq) +H2(g)

Diatomic molecule

Atoms reactants Atoms products

Zn– 1 Zn– 1

H – ~~1~~ 2 H – 2

Cl – ~~1~~ 2 Cl - 2

Add coefficient of 2 to HCl to balance H and Cl

Zn(s) + 2 HCl(aq) 🡪 ZnCl2(aq) +H2(g)

Now it is balanced! Matter was conserved!