Diatomic molecule

2. C3H8(g) + O2(g) 🡪 CO2 +H2O(g) + energy

Propane from reference sheet

Atoms reactants Atoms products

C – 3 C – ~~1~~ 3

H – 8 H – ~~2~~ 8

O – ~~2~~ 10 O – ~~3 6~~ 10

Add coefficient of 4 to H2O to balance H

Add coefficient of 3 to CO2 in product to balance C

Add coefficient of 5 to O2 in reactants to balance O

C3H8(g) +5 O2(g) 🡪 3 CO2 + 4 H2O(g) + energy

Now it is balanced! Matter was conserved!