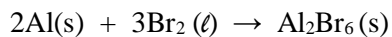


ANSWERS TO "TRY YOURSELF" PROBLEMS FROM STUDY SECTION 3.1

Try Yourself 3.1



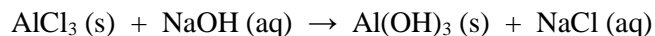
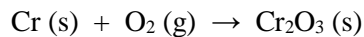
- Name the reactants and products and give their physical states.
- What are the stoichiometric coefficients in this equation?
- If you were to use 8000 atoms of Al, how many molecules of Br₂ are required to consume the Al completely?

Answer:

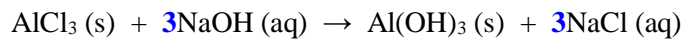
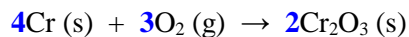
- Reagents: Aluminium (Aluminum, Al) and Bromine (Br)
Product: Aluminium bromide (Aluminum bromide, Al₂Br₆)
- Stoichiometric coefficients: **2** for Al; **3** for Br₂ and **1** for Al₂Br₆
- Ratio between Al and Br₂ = 2 : 3 = 3(8000)/2 = **12000 Br₂ molecules.**

Try Yourself 3.2

Balance the following reaction equations.



Answers:



Try Yourself 3.3

Write a balanced chemical equation for the combustion of butane, C₄H₁₀.

Answer:

Unbalanced



Balanced

