

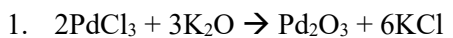
College Prep Chemistry of the Earth System

Assignment 7C

30 Points

Single Mass Stoichiometry

Using the balanced chemical reaction, determine the molar ratio. Use the molar ratio to convert between A and B.



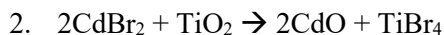
Convert 243.3g PdCl₃ to mol KCl

$$MM_{\text{PdCl}_3} = 212.77\text{g/mol}$$

Steps to Solve

A. Mass PdCl₃ → Mol PdCl₃

B. Mol PdCl₃ → Mol KCl



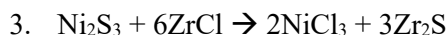
Convert 310.4g CdBr₂ to mol TiBr₄

$$MM_{\text{CdBr}_2} = 272.21\text{g/mol}$$

Steps to Solve

A. Mass CdBr₂ → Mol CdBr₂

B. Mol CdBr₂ → Mol TiBr₄



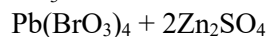
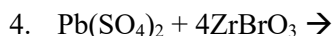
Convert 93.4g ZrCl to mol Zr₂S

$$MM_{\text{ZrCl}} = 126.67\text{g/mol}$$

Steps to Solve

A. Mass ZrCl → Mol ZrCl

B. Mol ZrCl → Mol Zr₂S



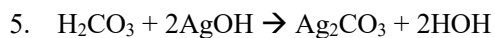
Convert 2.30mol ZrBrO₃ to mass Zn₂SO₄

$$MM_{\text{Zn}_2\text{SO}_4} = 226.85\text{g/mol}$$

Steps to Solve

A. Mol ZrBrO₃ → Mol Zn₂SO₄

B. Mol Zn₂SO₄ → Mass Zn₂SO₄



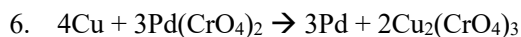
Convert 1.20mol H₂CO₃ to mass HOH

$$MM_{\text{HOH}} = 18.02\text{g/mol}$$

Steps to Solve

A. Mol H₂CO₃ → Mol HOH

B. Mol HOH → Mass HOH



Convert 0.930mol Pd(CrO₄)₂ to mass Pd

$$MM_{\text{Pd}} = 106.42\text{g/mol}$$

Steps to Solve

A. Mol Pd(CrO₄)₂ → Mol Pd

B. Mol Pd → Mass Pd