

May 23, 2019

Answers pg 235 #1-4

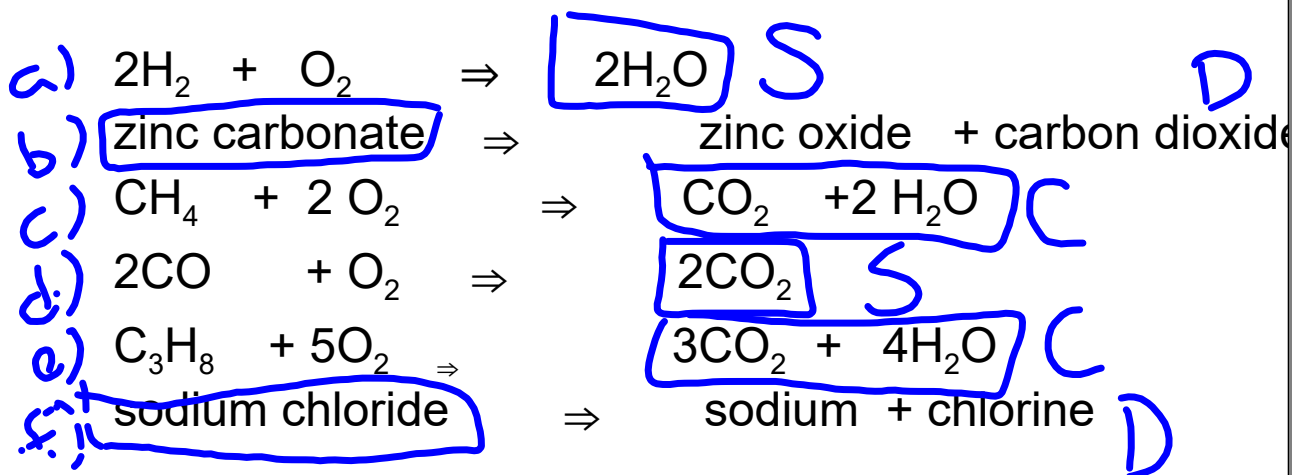
Single/Double Replacement Reactions

Test Tuesday Chp 6!!!

Warm-Up

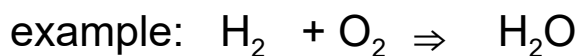
1. Label each of the following reactions:

combustion (C), synthesis (S), or decomposition (D)



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1. synthesis means to put atoms or molecules together



decomposition means to break molecules apart



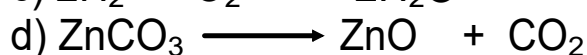
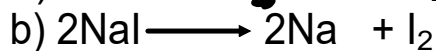
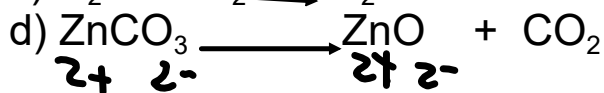
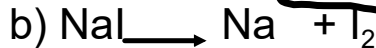
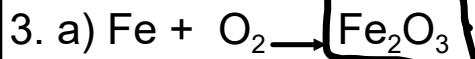
2. a) synthesis

b) decomposition

c) synthesis

d) decomposition

iron(III)oxide
 ~~$\text{Fe}^{3+} \text{O}_2^{-}$~~



Reactions so far...

Combustion

element/compound + O₂ ⇒ oxides + energy

Ex. C₃H₈ + O₂ ⇒ CO₂ + H₂O (complete)

C₃H₈ + O₂ ⇒ CO₂ + H₂O + CO + C (incomplete)

Synthesis

two smaller particles (elements) ⇒ one molecule

Ex. Zn + O₂ ⇒ ZnO

Decomposition

one molecule ⇒ smaller particles (elements)

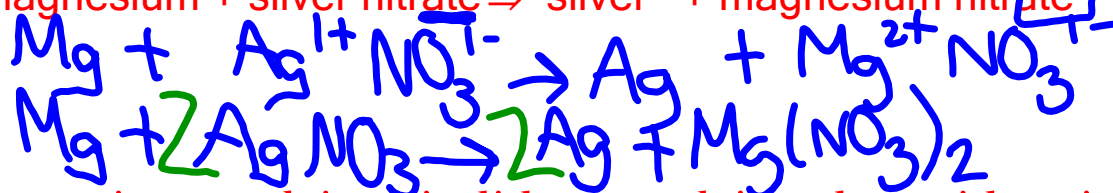
Ex. ZnO ⇒ Zn + O₂

Single Replacement Reactions

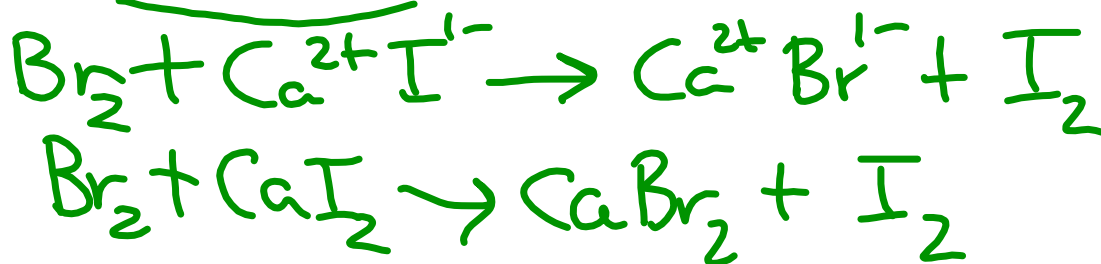
Single replacement reactions are chemical changes that involve an **element** and a **compound** as reactants and an **element** and a **compound** as products.

⇒ a metal displaces a metal, or a nonmetal displaces a nonmetal.

Ex. magnesium + silver nitrate ⇒ silver + magnesium nitrate



Ex. bromine + calcium iodide ⇒ calcium bromide + iodine

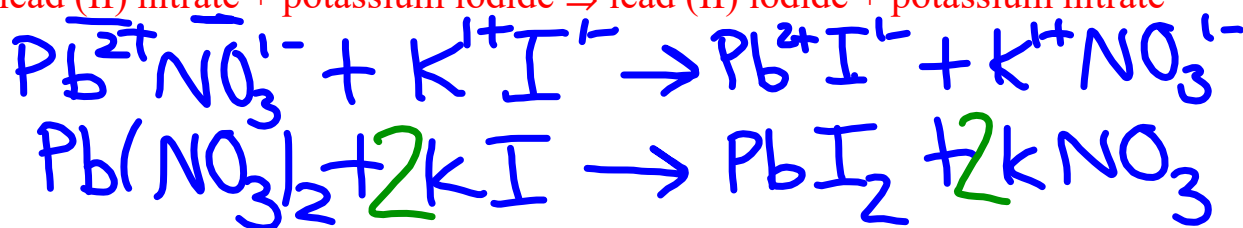


Double Replacement Reactions

Double replacement reactions are chemical changes that involve **two compounds** as reactants and **two compounds** as products.

⇒metals (or nonmetals) will 'trade'

Ex. lead (II) nitrate + potassium iodide ⇒ lead (II) iodide + potassium nitrate



Homework

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