Chapter 7 Worksheet

Homework is not collected or graded, but should be worked on seriously every week.

Part A: Writing Equations and Classifying Reactions

1. Write balanced chemical equations for each reaction described below, then classify them as either combination, decomposition, combustion, single displacement or double displacement reactions.

a. Phosphoric acid reacts with pure sodium metal to form pure hydrogen and aqueous sodium phosphate.

Equation:_____

Classification:_____

b. Benzene liquid (C_6H_6) burns in oxygen to form carbon dioxide and water (and heat).

Equation:_____

Classification:_____

c. Calcium nitrate (*aq*) reacts with lithium sulfide (*aq*) forming solid calcium sulfide and lithium nitrate (*aq*).

Equation:_____

Classification:_____

d. Sodium bicarbonate when heated will form solid sodium carbonate, carbon dioxide and water vapor.

		Element
magnesium (Mg)	Pure substance	Element
acetylene (C_2H_2)	Pure substance	Compound
tap water in a glass	Mixture	Homogeneous
pure water (H_2O)	Pure substance	Compound
soil	Mixture	Heterogeneous
chromium (Cr)	Pure substance	Element
baking soda ($NaHCO_3$)	Pure substance	Compound
salt + pure water ($NaCl + H_2O$)	Mixture	Homogeneous
benzene (C_6H_6)	Pure substance	Compound
muddy water	Mixture	Heterogeneous
brass (Cu mixed with Zn)	Mixture	Homogeneous
Pizza	Mixture	heterogeneous