

Homework Set 4

(Distributed 9/28/16; Due on 10/5/16)

Read Chapters 5 & 6 in Zumdahl and complete the listed questions from the text:
Chapter 5: 19, 36, 40, 42, 49; Chapter 6: 39, 73, 78; as well as the following problems:

A. Complete the table below with the missing ion, formula or name:

Cation	Anion	Ionic Formula	Name
Sr^{2+}	N^{3-}		
		$(\text{NH}_4)_2\text{CO}_3$	
			Sodium perchlorate
		$\text{K}_2\text{Cr}_2\text{O}_7$	
			Calcium phosphate

B. Write the name or formula for the following molecular compounds:

(i) BrF_3

(ii) dinitrogen pentoxide

(iii) P_4O_{10}

(iv) carbon tetrachloride

(v) Selenium hexafluoride

C. Suggest three different indications that a chemical reaction has occurred.

D. Balance the chemical reactions shown:

