

College Prep Chemistry of the Earth System

Assignment 6E

30 Points

Polyatomic Ion Molar Conversions

*Answer the following questions*

1. For the following compounds find the molar mass:
  - a.  $\text{BeSO}_4$
  - b.  $\text{Na}_3\text{PO}_4$
  - c.  $\text{Al}_2(\text{CrO}_4)_3$
  - d.  $\text{Sn}(\text{CO}_3)_2$
2. Using the molar masses calculated in 1, perform the following molar conversions between the units given
  - a. 14.50g  $\text{BeSO}_4$ , convert to mol
  - b. 592.5g  $\text{Na}_3\text{PO}_4$ , convert to mol
  - c. 40.34g  $\text{Al}_2(\text{CrO}_4)_3$ , convert mol
  - d. 4.20mol  $\text{Sn}(\text{CO}_3)_2$ , convert mass
  - e. 1.49mol  $\text{Na}_3\text{PO}_4$ , convert mass
  - f. 12.9mol  $\text{BeSO}_4$ , convert to mass