

**Ch4/PowerPoint Study-2 Acid Base and Redox Reactions**    **Name:**

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*Answer these questions as you are watching the videos. They are due in class.*

*These questions are not just for you to answer but also to prepare you for the exam.*

*Make sure you understand what you are writing and not just copy from the text book. **Show all work.***

1) Which of the following compounds are acids and which are bases? And which is neither?

NaOH

NaNO<sub>3</sub>

H<sub>3</sub>PO<sub>4</sub>

NH<sub>4</sub>OH

HNO<sub>3</sub>

2) Write the molecular, ionic and net ionic equation for the following reaction.

Sulfuric acid and aluminum hydroxide. (Classify this as precipitation, acid base or redox reaction)

3) Calculate the oxidation number on sulfur for each of the following compounds.

a) H<sub>2</sub>S

b) SO<sub>2</sub>

c) SCl<sub>2</sub>

d) H<sub>2</sub>SO<sub>3</sub>

e) Na<sub>2</sub>SO<sub>4</sub>

4) Write the chemical equation for the reaction of aluminum and oxygen (redox reaction). Write the oxidation numbers on each of elements on reactant and products.