1. Percent Composition: Determine the percent composition of each element in aluminum sulfate.

2. A certain compound is 34.9978 % nitrogen, 5.0370 % hydrogen and 59.9652 % oxygen. Determine the empirical formula of the compound.

3. Strong acids: Name and write the formula of the six strong acids and the seventh, which is not always considered.

	Name	Formula
1	IVAILLE	Tormula
2		
3		
4		
5		
6		
7		

3. Complete and balance the following:

 $C_4H_{10}O_2(I) + O_2(g) \rightarrow + + O_2(g)$ 

4. Combustion analysis of 2.56g of an unknown hydrocarbon produced 8.80g of carbon dioxide and 1.44g of water. What is the empirical formula of the unknown? (There may or may not be oxygen present...)

A) What are the components in a combustion reaction?

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B) What is a hydrocarbon?

C) What variables are known and unknown? Work with your group to diagram a flow chart and solve the problem.

Flow Chart:

Known:

D) Discuss with your group the difference between an empirical and molecular formula.