## Stoichiometry Practice Worksheet

Solve the following stoichiometry grams-grams problems:

1) Using the following equation:

$$
2 \mathrm{NaOH}+\mathrm{H}_{2} \mathrm{SO}_{4} \rightarrow 2 \mathrm{H}_{2} \mathrm{O}+\mathrm{Na}_{2} \mathrm{SO}_{4}
$$

How many grams of sodium sulfate will be formed if you start with 200 grams of sodium hydroxide and you have an excess of sulfuric acid?
2) Using the following equation:

$$
\mathrm{Pb}\left(\mathrm{SO}_{4}\right)_{2}+4 \mathrm{LiNO}_{3} \rightarrow \mathrm{~Pb}\left(\mathrm{NO}_{3}\right)_{4}+2 \mathrm{Li}_{2} \mathrm{SO}_{4}
$$

How many grams of lithium nitrate will be needed to make 250 grams of lithium sulfate, assuming that you have an adequate amount of lead (IV) sulfate to do the reaction?

## Solutions for the Stoichiometry Practice Worksheet:

For both of the problems on this worksheet, the method for solving them can be found elsewhere in the "Mr. Guch's Helpdesk" section of my website (http://www.chemfiesta.com). If you're having problems with stoichiometry problems, I would highly suggest consulting this section of the site before answering these questions.

When doing stoichiometry problems, people are frequently worried by statements such as "if you have an excess of (compound X)". This statement shouldn't worry you... what it really means is that this isn't a limiting reagent problem, so you can totally ignore whatever reagent you have an excess of. Don't even give it a second thought, because if you do, you'll run into trouble.

1) 355.3 grams of $\mathrm{Na}_{2} \mathrm{SO}_{4}$
2) $\quad 313.6$ grams of $\mathrm{LiNO}_{3}$
