Name:_____ Date:_____
Group Members:_____
Product: _____ Materials Class:_____

WHY YOUR MATERIALS CLASS IS GOOD OR BAD

Understanding the different qualities and liabilities (bad things) about your class (metals, ceramics, or polymers/composites)

1. Write down different applications that your materials class is used for. Are any of these similar to the product you are redesigning?

2. Write down the processing methods used for your particular materials class. Would these processes be useful for the redesign of your product?

3. Now look at your Constraints document (ORGANIZING THE DESIGN PROCESS). Was there anything particular your product needed? Any conditions that your product had to meet? (i.e. Resistant to corrosion, strong, biodegradable, etc.) Does this materials class meet those requirements?

4. Now look at specific materials within your materials class, what are the differences between the specific materials, is there any particular one that seems better than the others (i.e. Cheaper, more corrosion resistant, etc.) Try to get an idea of which ones seem best.

5. Make sure that you are accounting for aesthetics (looks) and price. Write down some ball park figures (averages, estimates) of the cost per pound of the best fitting materials, and about how much material you'll need for your product.

6. Do you think your materials class is a good fit for your product redesign? Write a paragraph convincing your partners why or why not.