**WORKSHEET #3: LITERATURE SEARCH FOR RESEARCH PROJECT PAPER AND**

**HOFMANN CHAPTER 10**

**RESEARCH PAPER**

HYPOTHESIS: A beluga whale can learn to discriminate between objects associated

with different rewards in order to maximize reward.

1. Pick **three major topics** that you would need to research in order to understand the hypothesis presented above, and list those topics below.

1.

2.

3.

2. For **EACH** of the major topics you listed above, come up with three terms that you could use to search the General Science Full Text Database in order to find primary sources that address each of your three major topics.

Major topic #1:

1.

2.

3.

Major topic #2:

1.

2.

3.

Major topic #3:

1.

2.

3.

3. Using the terms you have identified above, search the General Science Full Text Database (Under Publication Type, select **Academic Journal**) and find TWO primary OR secondary sources that address EACH of your major topics (**SIX** sources total). Using the literature reference format presented in the Instructions for Authors for *Molecular Genetics and Genomics* or your textbook (pages 167-168), list the six sources you have found as they would appear in your literature cited section.

4. In the General Science Full Text Database, mark the six sources that you referenced above by clicking on the folder labeled with a plus sign, which is found directly to the right of the title of each article on the Search Results page. By clicking this folder, you will place the associated reference in your folder. You will need to repeat this step for each of your six sources. Once you have all six references in your folder, click on the words Folder View, which you can find on the right hand side of the page in a box labeled Folder has items or you can also click on the word Folder at the very top of the page, toward the right hand side.

You will now be taken to your folder, in which you should find your six sources. Click on the Print icon on the far right side of the page. You will now be taken to the Print Manager Screen. **BEFORE** hitting the Print Button, select the drop down box next to the words Standard Field Format and select Brief Citation and Abstract. Next, click on the PRINT button. You will now be taken to a page where all six of your sources will appear, and the print window should pop up. Finally, click the Print button, and your job should be sent to the printer. **ATTACH the print off of your six records to this worksheet.**

**HOFMANN CHAPTER 10**

1. Why does the introduction below seem incomplete? Identify the known, unknown, question/purpose, and experimental approach by **INDICATING** these elements in the paragraphs below. Are these elements clearly identified? Why or why not?

Astaxanthin is a carotenoid that is found in microalgae, yeast, salmon, trout, krill, shrimp, crayfish, crustaceans, and the feathers of some birds (1,2). Astaxanthin is a natural nutritional component, but it is also used as a food supplement intended for human, animal, and aquaculture consumption (4).

Like many carotenoids, astaxanthin is a colorful, fat/oil-soluble pigment, providing a redish and pink coloration (2). Whereas in certain bird species, all adult members display carotenoid containing feathers rich in color, in many gulls and terns an unusual light pink coloring (or flush) to the normally white plumage can be found in highly variable proportions within and across populations (5). It has been suggested that some gulls turn pink because they acquire unusually high amounts of astaxanthin in their diets at the time of feather growth, especially in areas with farm-raised salmon (5). However, the exact relationship between astaxanthin and plumage is not fully understood. Here we examine this relationship in more detail and discuss its implication.

**DUE BY THE BEGINNING OF CLASS ON FRIDAY, SEPTEMBER 16th!**