**Why Don’t Whales Have Legs? Lab Activity**

Due: Friday, May 8th

**You will need to complete the following on a separate, *typed* sheet of paper.**

* Background
* Purpose
* Variables
* Hypothesis
* Materials
* Procedure
* Data
* Conclusion

**Background:** Using your prior knowledge about whales and the information discussed in class, describe some background information about the evolutionary information available about whales before forming a hypothesis and procedure.

**Purpose:** Discover a reason as to why whales do not have legs, despite having the vestigial structures of hind limbs.

**Variables**: Name the independent, dependent, and controlled variables of your experiment.

**Hypothesis:** Be sure to refer to this hypothesis using “If…, then…, because….” format.

**Materials:**

* One large container or sink that holds water
* One latex or plastic glove
* Two small plastic bags
* One rubber band
* One Styrofoam cup
* Hot water
* Cold water
* One thermometer

**Procedure:** Use the materials and prior knowledge to develop a hypothesis and to design an experiment that would support why whales no longer have legs. Then, formulate a procedure that would test the hypothesis, using the materials listed above. Be sure to identify the variables and control. Also, consider: What is the data going to look like?

*Hints: You need to create a whale, so think about the environment they live in. Also, you many need to look up the word homeostasis.*

**Data:** Create a data table with properly labeled title and axis.

**Conclusion:** Explain using the data and addressing the hypothesis…Why don’t whales have legs? Be sure to include: possible experimental errors and recommendations for further experimentation.