

Designing your own experiment assignment



For this assignment, you will design (not carry out) an experiment. Choose one of the 4 scenarios from lesson 01. 05 to design your experiment. You may fill in the template below with your information and submit this document as your 01. 05 assignment. Make sure to fill out all of the red and empty portions of this document to receive full credit. You may erase the red text after adding in your information.

You may also change the color of the text to black, if you desire. Scenario Topic Chosen: Free Willy? Problem (2 Points) What is the purpose of your experiment? What are you trying to find out? Problem(s): Does keeping Orca Whales in captivity affect their lifespan and health? Do wild Orca Whales have a longer lifespan? Research (2 Points) What topics would you be researching? Behaviors of Orca Whales, affects that captivity has on once wild animals, differences between captivity and the wild. Hypothesis (4 Points) This is your prediction of the outcome.

Your hypothesis should include an explanation of WHY you expect that outcome. See this website to help you learn how to write a hypothesis: Writing Hypotheses. If an Orca Whale lives in captivity, then its health will be poorer than an Orca that lives in the wild. Procedure (4 Points) Write the exact steps that you followed to carry out the experiment in a clear and detailed way. Include measurements made and their corresponding units. Scientists always use the metric system (meters, liters, grams, Celsius, etc.). Number your steps below.

Step 1: Find and watch four-six Orca Whales (Half in the wild, half in an aquarium; along with one newborn in the wild and one in captivity) Step 2:

Observe behaviors differences of the animals (diets, play times. Etc.) for one month. Step 3: Observe growing behaviors of newborn Orca for one month.

Step 4: Record observations and write down results. Analysis (4 Points) What type of data would you collect? How would you analyze it? 1 : There is no situation that negatively affects an Orca Whale other than putting them in a walled in pool. 2: Pools are sense depriving to Orca Whales.

Orca can see for hundreds of awards and have an outstanding communication sense. This is deprived from an Orca when it is placed in a pool. Explain whether or not your hypothesis was supported by your results. Please keep in mind that you should be discussing your experiment here in various sentences. Include any real-world applications / impact upon life that this experiment has. My results proved my hypothesis correct. Orca Whales that live in the wild have longer lifespan because they exhibit their natural behaviors and are not confined in a small space.