

Consider these three questions, and make a prediction about what you think the answer is. This prediction is what we will call a “hypothesis.”

1. What types of pets do Americans have?
Prediction: _____
2. Do insects continue to grow larger throughout their lifetimes?
Prediction: _____
3. Are children who are raised on a vegan diet shorter than children raised non-vegan?
Prediction: _____

Using [this graph choice chart](#), work through which graph would be best for answering these three example questions.

We will discuss the options as a class, and decide which graph type to use.

Using the simulated data given to your group about one of these questions, draw a graph to display those data using the type of graph the class decided would be most appropriate.

((develop different simulated data sets for each question; variable sample sizes; pets of zookeepers vs. attendees at Westminster dog show...etc))

Now, write down the question you came up with in our last assignment about the great black-backed gulls. What did you want to know about them?

Write down your hypothesis about what the answer to your own question might be.

Using the graph choice chart again, and your new skills at choosing graphs, decide which graph type would be best for you to use in displaying your data.

Write your choice, and why you chose it, here: _____

Draw an example graph that would **support** your hypothesis here:

Draw an example graph (should be the same TYPE of graph as the previous one) that would **not support** your hypothesis here:

Explain how the two graphs are different, and why that difference is important in answering your question.

Rubric:

U = assignment is not complete/I don't have enough to evaluate you on

R/R = revise and resubmit, addressing whatever is circled on this list

- Graph choice is inappropriate to the type of data
- Graph choice is not explained
- Support and not support graphs don't show a difference in outcomes

- The difference between the two graphs is not explained

S = satisfactory