

# Avida Worksheet 3

## **Group Name and Members:**

If nothing has changed about your question, hypotheses, methods, and predictions, please cut and paste those sections here from your first worksheet. If you want to change any part of these previous sections, please place the new version(s) here.

## **There are three new sections for this second worksheet:**

- 1. Full Data:** Please graphically present all of your collected data below. A short description of your data should be included too (e.g., a Figure legend). This should provide a basic description of your results, and offer important experimental details, such as how many replicates of each treatment you conducted.
- 2. Statistical Analysis Ideas:** Please describe how you are currently thinking that you will approach the analysis of your data. It would be good to name the test (or tests) that you plan on using (e.g., t-test, ANOVA, 2-factor ANOVA, regression, sign, exact, etc.). You do not have to conduct the test for this worksheet.

- 3. Redesign Section:** In light of all of your data, think about the support (or lack thereof) for your initial hypotheses. Sometimes data leads us to propose new hypotheses, and conduct new experiments. Sometimes data doesn't change our hypotheses, but does change how we conduct the experiment to test our ideas. This section is your chance to evaluate your original ideas in light of your full data, and, if appropriate, to propose new directions inspired by your data (*please note, you are not expected to actually conduct new experiments for this worksheet, just discuss them*):
- a. If you are proposing to test new hypotheses, make sure to provide a clear description of your motivation, full presentation of the new hypotheses, details about how the experiment will be done, and what you expect to occur.
  - b. If you are proposing a shift in what you have already done (but not a shift in your basic hypotheses), explain how you want to conduct your experiment differently and why (e.g., What are the new parameters and why? How many replicates and why? What is the new predictor/response variable and why? etc.)