1. Review your *Experimental Design Worksheet*. What was the question you were trying to answer? What variable were you testing? What was your hypothesis? Keep these in mind!
2. With the method that we used in our experiments, it will be difficult to quantify (count or produce numbers) from your results. To analyze our data we are going to take an *observational* approach:
   1. Find the picture of your YPD plate(s). Each picture is named with the information that you wrote on the back, which should have been your name(s) and the variable being tested.
   2. Find the picture labeled “CONTROL”. This has yeast that was plated and grown in the exact same way that your plates were. The only difference was that the control **did not** have any variables applied to it. (**No** **change** in salt, pH, temperature, etc.)
      1. The purpose of a control is so that you can compare the results of the variable that you applied to see if it made any difference in the normal growth of the yeast.
      2. The species of yeast which we used makes colonies (dots of growth) that are off-white and have a glossy appearance to them. These have over a million yeast cells bunched together in them, which is why we can see the colonies without a microscope!
   3. Compare your plate(s) to the control:
      1. Did you plate have less yeast growth than the control? More? About the same?
      2. Were there any other microorganisms growing on your plate? (Every microorganism makes colonies that look different. If the growth does not look like the control, it is not yeast.)
      3. What other differences can you see from your plate to the control?
3. Now that we’ve collected our observations, we can draw some conclusions about our results and the experiment in general:
   1. What effect did the variable you tested have on the growth of yeast? Did it have any effect at all?
      1. Do the results support your hypothesis?
   2. What does this say about the limits of yeast? Does it “like” the variable you tested?
      1. What adaptations does this microorganism have?
   3. Considering the above, what environments could you find this microorganism? What environments would this microorganism not really be found?
   4. If there was any other microorganism found growing on the plates, what does this say about how the experiment was conducted? (Consider the question you were trying to answer!)
   5. What are some ways that you could improve the experiment?
4. Hopefully you enjoyed the experiment and learned some things about microbiology and adaptations!