To Mold or Not to Mold

We keep food in refrigerators so it will last longer. But still, sometimes you open a bag of bread or a jar of spaghetti sauce and what do you find? MOLD!

Ever wonder exactly what mold is? And how did it get there? And why sometimes it is green and other times black or white? You probably know that it is alive and growing, but what kind of organism is it?

In this experiment, you’ll learn all about mold by growing your own crop. You will be exploring the conditions under which mold will best grow on bread (and other grains). This will be a long-term activity that will be conducted over the next few weeks. This will allow time for the mold to grow. For safety reasons, don’t taste or eat the experiment!

What factors can affect the growth of mold on bread? How will we design this experiment?

* Each group will choose a unique question that they will explore. We will be generating questions tomorrow. Your assignment tonight is to think of *at least* three different factors that affect mold growth. Once questions are generated, each group will decide a hypothesis.
* Each student will conduct secondary resource research using previously recorded data from a professional research project to gather background knowledge.
* Each group will set up their experiment. This will include a control group against which you can compare your variables. Groups will monitor the amount of mold growth over a period of 3 weeks.
* Each student is responsible for recording the estimated percentage of mold growth in each of their samples. This data will be kept in your science notebook.
* Once the data is collected, groups will be analyzing the data. You will be responsible for creating *at least one* table and *at least one* graph that represents your findings.
* After analyzing data and either supporting or rejecting your group hypothesis, each student will be responsible for writing a one page project abstract that summarizes the work you have done during the project.
* The final assessment will be a brief 10-15 minute group power point presentation during which you will share your group’s:
  + Question and hypothesis
  + Secondary research
  + Methods and materials
  + Data results and Analysis

Throughout this project, you will receive support from the visiting scientists. Please ask them for assistance if you feel you need any help. Good luck!