SO... How Fast Will They Grow?

Introduction

Bacteria and fungi are all around us. They are responsible for many things. Most importantly, they decompose dead plants and animals and convert them into soil and nutrients that other living things can use. They are a part of all ecosystems. Some bacteria and fungi, however, can be harmful. These are called pathogens. It important for people to understand how to minimize the amount of pathogens so that the food they eat can be nutritious and safe.

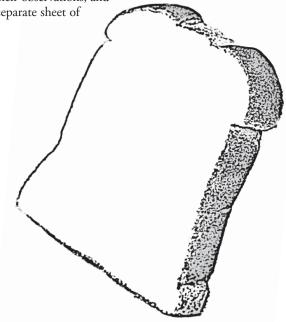
You and your partner are to design an experiment that will encourage or discourage bacteria and fungi from growing on a piece of bread. Before you place it in the plastic bag, you may expose it to a doorknob, backpack, notebook, or even moisture or heat. Or, you may expose it to nothing other than the container it was in. You decide! Design your experiment, have your teacher approve your procedure, and then perform your experiment.

Remember, scientists always create hypotheses, list their procedures, record their observations, and write conclusions. So, as a scientist, you will complete all of these steps on a separate sheet of paper. Here is how your completed write-up should look.

Think About It!

Do bacteria and fungi prefer light or dark places? What about moisture? What about heat?

Life: The name of the experiment
The name of the experiment
Purpose: What you are trying to learn
Hypothesis: Your guess as to what
Will happen
Materials: The materials you used
Procedure: The detailed steps
you performed
Observations: Charts and sketches
clarifying what you observed
observations
Charts and system
conclusion: What your experiment
proved or disproved



SAFETY NOTE:

Once you place your bread in the plastic bag and seal it, you may not open it under any circumstances. Some bacteria and fungi can be harmful. When finished with the experiment, give your bread, still in the sealed bag, to your teacher for proper disposal. You don't want to get a disease from a pathogen!