Name:	Date:	Period:
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## **Activity: Please Pass the Bread**

**Problem**: What factors are necessary for bread molds to grow?

Materials: For each group of 4:

- 1) 2 paper plates
- 2) 1 Plastic dropper (pipet will work as well)
- 3) 2 slices of bread (preferable without preservatives)
- 4) 2 sealable plastic bags (pint to quart size, easily fit bread slice)
- 5) 1 plastic cup (to be filled with water)
- 6) Packing tape
- 7) sharpie (to label bags)
- 8) 4 Pairs of safety goggles

## **Procedure:**

- 1) Students will follow these directions for conducting the preparation of the bread samples.
  - a) Place 1 slice of bread on each plate.
  - b) Add drops of water to one slice until the whole slice is moist, but not over-saturated.
  - c) We will keep the slices exposed to air for 20 minutes
  - d) We will then slide each slice (without putting the plate in the bag) into a plastic bag and seal it. We will also seal it with packing tape to ensure it stays sealed.
  - e) We will then label each bag with the names of the group members and period
  - f) Bags will be placed in a cabinet to be removed from light, except during daily observations.
- 2) Once preparation is complete, students will cleanup, return all materials to the science counter, and return to their normal seats.
- 3) Students will record mold growth for the next 7 school days.
- 4) Students will answers analyze and conclude questions on activity sheet to turn in with their data tables.

## **Data Table**

		Moistened Bread Slice		Unmoistened Bread Slice	
Day	Day of	Mold	Area with Mold (%)	Mold	Area with Mold (%)
	Week	Present		Present	
		(Y/N)		(Y/N)	
1					
2					
3					
4					
5					
6					
7					
8					

**Analyze and Conclude** – Answer in complete sentences on a separate sheet of paper

- 1) What conclusions can you draw from each of your experiments?
- 2) What was the variable in the first experiment? The second experiment?
- 3) What basic needs of living things were demonstrated in this lab? Explain?
- 4) What is meant by "controlling variables"? Why it is necessary to control variables in an experiment?