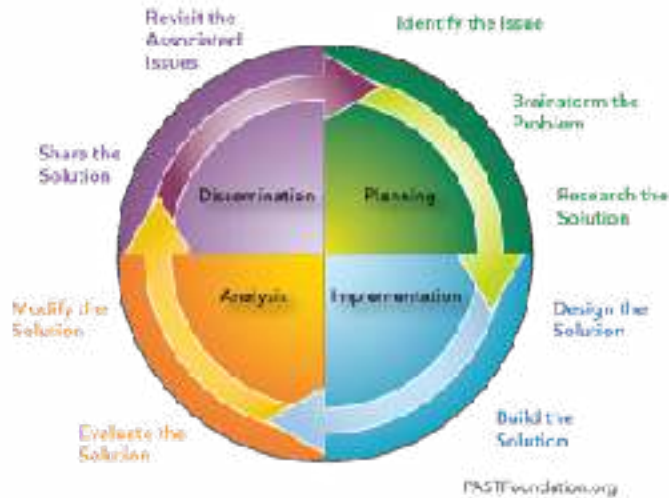


Moldy Bread Infection Mini Challenge

Name: _____

Date: _____



Problem Scenario:

Infection rates for bacterial and viral illnesses need to be measured and documented. The location of bacteria in your home needs to be measured and located.

Challenge:

Using bread slices determine where bacteria is growing in your home. Swab slices of bread on various surfaces in your home and contain the bread in a Ziploc bag. Use a non-swabbed piece of bread as a control. Measure the growth on your slices of bread.

Criteria:

- Ziploc Bags /Bread
- Document any growth and be able to identify if the growth is from where the surface was swabbed.

1. Brainstorm: Use the space below to brainstorm the design and approach to growing bacteria on a bread slice.

- What nutrients does mold need to grow?
- What surfaces might have mold spores on them?
- Does temperature matter in mold growth?
- What do different types of mold look different?
- What does the color of mold indicate?
- What does the shape of mold indicate?

2. Design:

- How can I wipe the bread across a surface without putting my fingers on the "swab side" of the bread?
- How can I bag the bread without touching the "swab side"?
- Does the temperature of the bread in the bag make a difference in growth?

3. Build:

Follow your design and gather your samples.

4. Evaluate:

Look at your results. What could be done differently to assure that you have accurate results? What other items could be tested?

5. Modify:

Re-test using ideas from your evaluation.

6. Share:

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