Math 2A, Winter 2012 Name: _____

Moldy Bread Experiment

Take a slice of bread, sprinkle with a half bottle-cap full of water, enclose in a small plastic bag, and store in a lighted place.

1. Measure amount of mold at 24 hour intervals using the 5 mm grid handed out in class.
2. To determine the amount of mold, count squares for which more than 1/2 the square contains mold.
3. Record the amount of mold each day.
4. Record approximate temperature conditions (room temp, variable temperature, etc.):

5. Record light exposure (try to use placement in daylight):

6. Record whether you close the bag or leave it open:

7. Record amount of water used, suggested amount is 1/2 water bottle cap:

8. Record brand and type of bread used:

9. Record type of water used (tap water, bottled water, etc.):

10. Record the volume/dimensions/depth of the bread:

11. Record the bread age:

12. Take photos (if desired).
13. Record the length of experiment (at least two weeks):

14. At end of experiment **write a report** displaying numerical data, graph (% area of mold vs. time), the information specified above, and an equation approximating the data. Use a graphing calculator or other software to find the best fitting equation. Decide whether your data supports the logistic growth model. Attach to this page.

Best fitting equation: _____