

# Making Bread

## Investigating Microbes

Try a series of models applying differing values to the variables and make a record of the results. Plot your results in a graph to see if there is a correlation, for example, between the water temperature and the amount of CO<sub>2</sub> produced or the amount of sugar used compared to the amount of gas generated. You will need to consider a control before changing all the variables!

Using your graphs, can you make predictions for different variables? Check your predictions against the model.

Use this document to collect your variable data. Once you have collected sufficient data you can enter the information into a series of spreadsheets (Microsoft Excel for example) and plot the graphs of your results.

- Once you have plotted your graphs what do you notice?
- Can you think of any reasons for this?
- What is the mathematics underlying your graphs?
- Use the graphs to predict an outcome and then test it with the model.
- Can you represent your data differently?

Test #	Temperature (° C)	Sugar (g)	Vol. of CO <sub>2</sub> (cm <sup>3</sup> )	Time (mins.)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				