



Handout 6.7: Quick Bread Lab Sheet

Name: _____ Date: _____ Period: _____

Station: _____ My role: _____

Print for every student. Bring it both days. Day 1 is pages 1 to 3, Day 2 is pages 4 and 5.

DAY 1

Part 1. How leavening works

Write it in four sentences, in your own words.







Which one needs an acid to work? Circle: baking powder / baking soda

Where does the acid come from in a real recipe? Name three sources:

1. _____ 2. _____ 3. _____

Part 2. The four-cup fizz test

Cup	What is in it	What happened (none, a little, a lot)
1	Baking soda + water	
2	Baking soda + vinegar	
3	Baking powder + water	
4	Baking powder + vinegar	

The rule, in one sentence:

Baking soda needs _____, and baking powder does not because

Part 3. The experiment setup

The four batches

Batch	Leavening treatment	What I predict
A (control)	1 tsp baking powder	
B	none at all	
C	2 tsp baking powder	
D	1 tsp baking soda, no acid	

Variables

Independent variable (the one thing we change on purpose):

Dependent variable (what we measure to see the result). Name all three:

1. _____ 2. _____ 3. _____

Constants (everything we keep exactly the same). List at least four, and go for eight:

1.	5.
2.	6.
3.	7.
4.	8.

Why do we need Batch A at all, if we already know a normal muffin rises?



Part 4. My hypothesis and prediction

My hypothesis (one sentence, in the form “if we change , *then* ”):





My prediction: rank the four batches by how high I think they will rise.

Highest ____ second ____ third ____ lowest ____

Batch D prediction: what will it taste like and why?



Day 1 exit card

The one thing we are changing is _____.

Batch _____ will rise the highest because _____.

DAY 2

Part 5. Data

Measure the batter height in the liner before baking and the muffin height after. Use the ruler.

Batch	Height BEFORE baking	Height AFTER baking	How much it rose	Crumb (none, few, or many holes)	Taste
A (control)					
B (no leavening)					
C (double)					
D (soda, no acid)					

Time the tin went in: _____ Time it came out: _____ Oven temperature: _____

Actual ranking by height

Highest _____ second _____ third _____ lowest _____

Compare to your prediction

Batch	I predicted	What actually happened	Same or different?
A			
B			
C			
D			

Part 6. Conclusion

Fill in all four parts.

The data showed _____



My hypothesis was (circle one) **supported** / **not supported** / **partly supported**, because



My evidence is _____



One thing that could have gone wrong with our test is _____



One sentence our station can read out loud at the station check:



Station check

Line	Done?
Oven off, tin on the trivet, nothing hot left out	
All four bowls washed, dried, and put away per the drawer map	
Measuring cups and spoons washed and put away	
Counters wiped and sanitized	
Sink empty and rinsed	
Floor swept, trash out	
Leavening jars returned to the teacher's table	

Teacher signature: _____

Grade 8 stretch: Batch E

Batch E: 1 tsp baking soda PLUS 1 tsp white vinegar. Everything else the same.

Batch E	Before	After	How much it rose	Crumb	Taste

Does Batch E behave more like Batch A or more like Batch D? _____

What does that prove? _____



Name one confounding variable in our own test (something we did not control that could have affected the result), **and say how you would control it next time.**

The variable: _____

How to control it: _____