

•  Scientific Method Mixer...Yes? No?   Date _____ pd. _____

Today you will use the scientific method to conduct some science research in class. First, let's review the scientific method.

I.	
II.	
III.	
a.	
b.	
c.	
IV.	
a.	
b.	
c.	
V.	

Think of a "Yes or No" question that deals with a question you have about **science** or maybe the **ethics of science** ("right/wrong" or "good/bad") in the field of science. Remember, when you ask a person your question, their answer must be either a "yes" or "no". Example includes:

- ❖ *Should they continue funding for stem cell research?* ❖ *Would you donate your organs?* ❖ *Are all microorganisms harmful?*

Complete the following lab report (follow the steps of the scientific method)

I. _____

II. _____ THERE ARE ____ TODAY. # people will say "yes" ____ # people will say "no" ____

III. _____

- a. **materials (no need).**
b. **Procedure (no need).**

IV. _____

a. _____ (Create your chart below).

... Said "YES"	... Said "NO"
Total # of people surveyed _____	# of people said "yes" _____
	# of people said "no" _____

b. _____

- Calculate the percentage % of people that said “yes” and “no” (show all work).

<u>Formula</u>	% of people that said “yes”	% of people that said “no”

- Calculate the percentage error of people that said “yes” and “no” for your question.

	% error of people that said “yes”	% error of people that said “no”

V. _____

1. Analyze your data and results. What were the results? What do they mean?
2. Did you answer the question or solve the problem? Explain.
3. Was your hypothesis correct? Why or why not? Refer to your experiment and/or data.
4. Answer any discussion questions on the lab or activity handout. Answer in **complete sentences**.
 - a. How could you improve your experiment to find out more about your question?
5. What could you do to take this experiment to the next level?

VI. Going Further - Results from Other Researchers in this Class

- a. Copy down 3 questions and results that interest you.

What were they trying to find out?	Their “yes” Prediction	Actual “yes”	Actual “no”
1.			
2.			
3.			

- b. Now find the “yes” percentage error for the 3 questions you wrote above. Show Work!

1.	2.	3.