

Measuring Main Street

Name:	Date:
Group members:	Block:

5 points of your grade on this activity will be based on the accuracy of your measurement.
_____ : Accuracy

Basic Procedure:

1. Get your group's measuring tool(s) from Mr. A.
2. Bring this sheet, the tool(s), and a pencil out to Main Street.
3. Measure how long it is! Be sure to measure in units of your tool.
4. Measure the length of your tool in meters

Discussion (2 points):

Before we really get started, we need to discuss what Main St. is and where we want to measure.
Notes:

Data (5 points):

Our measuring tool(s):

How we used it:

Here's a space for any notes you need to take while doing your measurements (about how you're doing it, or for keeping track of where you are at in the measurement)

Length of Main Street (in terms of your tool):	
Length of Your Measuring Tool (meters):	

Questions (8 points): a.) What sorts of things do you think affected how accurate your measurement is? (Give at least 3 possible sources of error.)

b.) How much error do you think you have in your measurement (be specific)?

Data Sharing (4 points):

	Tool	Measurement of Main Street (Include units)	Length of Tool in Meters
a)			
b)			
c)			
d)			
e)			
f)			
g)			
h)			
i)			

Calculations (20 points)

a.) Show all of your conversions to meters for each of the measurements.

a)

b)

c)

d)

e)

f)

g)

h)

i)

- b.) Record converted length measurements in the table below
- c.) Calculate the average length of Main Street in meters
- d.) Calculate the deviation of each measurement from the average.
- e.) Calculate the average deviation. **Remember units throughout!**

	Tool	Measurement of Main Street in meters	Deviation	% Error
a)				
b)				
c)				
d)				
e)				
f)				
g)				
h)				
i)	Average:			

Average Deviation in meters: _____

Actual length of Main St.: _____

More calculations: Show 1 example calculation of how you found the average, deviation, and % error

Conclusion (6 points):

State the purpose of this lab. Discuss how much error there was in your group's measurement, and in the class overall. Also discuss the causes of these errors. Include suggestions as to how you could improve your measurements (how would you change your technique?).