



7TH SCIENCE
SCIENTIFIC MEASUREMENT
LAB

Name: _____

Date: _____

Class: _____

Measuring Mass Lab

I. CHOOSE A PROBLEM

Which object has the largest mass?

II. RESEARCH YOUR PROBLEM

Use your notes to answer the questions below.

1. What is the base unit of mass? _____

2. What tool do we use to measure mass? _____

3. Where should the riders be before you start using the triple beam balance?

4. How do you “zero” the triple beam balance?

5. Which rider do you move FIRST when you are finding the mass of an object?

6. Which rider do you move SECOND when you are finding the mass of an object?

7. Which rider do you move LAST when you are finding the mass of an object?

8. After you have moved the riders properly, how do you find the total mass of the object?



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III. DEVELOP YOUR HYPOTHESIS

If I find the mass of each object, then the _____ will have the greatest mass because _____

IV. WRITE YOUR PROCEDURES

1. Make sure all of the _____ are at the “zero” mark.
2. The balance must be _____ before you are able to get an accurate measurement. To do this, turn the _____ until the white line on the pointer lines up EXACTLY with the zero line.
3. Place the object you wish to measure on the _____.
4. Move the rider on the middle beam (the _____ rider) to the right one notch at a time. When the pointer dips below the zero line, move the rider back one notch to the left.
5. Move the rider on the back beam (the _____ rider) to the right one notch at a time. When the pointer dips below the zero line, move the rider back one notch to the left.
6. Slide the rider on the front beam (the _____ rider) to the right. Slide this rider until the pointer lines up EXACTLY with the zero line.
7. Add the values shown by the riders on each beam to obtain the mass of the object. Make sure to include units!
8. Record the mass of the object in the table below. Record each mass to the nearest _____.
9. Repeat Steps 1-8 for each of the objects provided to your group.



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V. VI. TEST YOUR HYPOTHESIS AND ANALYZE YOUR DATA

Name of Object	Mass of Object (g)
#1	
#2	
#3	
#4	
#5	
#6	
#7	
#8	
#9	
#10	



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VII. STATE YOUR CONCLUSIONS—Lab reflection and conclusion questions

* Please answer all parts of the following questions using complete sentences.

1) Which of the objects had the largest mass? What was the mass in grams?

2) Which of the objects had the smallest mass? What was the mass in grams?

3) Did you have any large objects with a small mass? If so, describe the objects and state their masses.

4) Did you have any small objects with a large mass? If so, describe the objects and state their masses.



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5) What was the most difficult part of this lab activity? Why was it so challenging?

6) Did your group work well together? What is one thing you would do differently during our next lab to help your group work together better?
