

---



---

## Unit 3:21 “Measuring Mass & Volume” Lab

---



---

Matter has characteristics called properties: Mass, Volume, and Density. In this investigation, you will be measuring the mass and volume of objects. Use your glossary to write the meaning of each property below:

**Mass** \_\_\_\_\_

\_\_\_\_\_

**Volume** \_\_\_\_\_

\_\_\_\_\_

**FINDING MASS:** Look, but don’t touch, the 3 film cans. Write a question you have about the contents of these film cans:

\_\_\_\_\_

\_\_\_\_\_

Pick up each film can but don’t shake them. Put them in order from lightest to heaviest:

Light \_\_\_\_\_ Lighter \_\_\_\_\_ Lightest \_\_\_\_\_

Predict the matter of each container:

A \_\_\_\_\_ B \_\_\_\_\_ C \_\_\_\_\_

Use a balance to measure the mass of each container and record your findings in the chart. After you have entered the mass of each container, open it and record the matter it contains in the Actual Contents column:

CONTAINER	MASS (grams)	ACTUAL CONTENTS
A	g	
B	g	
C	g	

*Unit 3:20 "Measuring Mass & Volume" Lab*

Write a sentence that tells what you've learned about mass:

---

---

---

**MEASURING VOLUME:** Liquid volume is measured in Liters; we will use a tool called a graduated cylinder that shows how many millilitres or mL

**A.** Pour the water from the cup into the graduated cylinder and record the volume: \_\_\_\_\_ (mL).

Write a sentence that tells the volume of the water:

---

---

You can find the volume of a solid object (a marble) by measuring how much the volume of water in the graduated cylinder rises when you gently lower the marble into the graduated cylinder.

**B.** Record the water level with the marble in it: \_\_\_\_\_ mL.

To find the volume of the marble: Subtract the volume of the water in Step A from the water level recorded in Step B.

**C.** Record the difference between Step A and Step B \_\_\_\_\_. This is the volume of the marble.

**D.** Write a sentence that explains how to find the volume of a liquid (water):

---

---

---

**E.** Write a sentence that explains how to find the volume of a solid object such as a marble using a graduated cylinder:

---

---

---