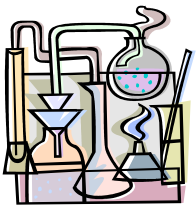
Answer Key



Using Lab Equipment

Which is larger? Choose one answer for each pair.

A. 2 kilograms or 1500 grams of salt
B. 11 milligrams or 11 kilograms of flour
C. 1300 milligrams or 1 gram of sugar

Find the mass of three objects using the triple-beam balance. Objects could include pennies, popcorn, seeds, screws, washers, or M&Ms.

1. Place the piece of filter paper on the pan. Then place item(s) on top of paper.
2. Slide the largest weight rider to the right until the arm drops below the line and then move it back one notch.
3. Repeat this process with the middle weight rider. When the arm moves below the line, back it up one groove.
4. Slide the smallest weight rider on the front beam until the scale lines match up.
5. Add the amounts on each beam to find the total mass to the nearest tenth of a gram. [hundreds + tens + tenths = total mass]
6. Record the mass on the data table.(mass amounts may vary)

Object	Mass (g)

Find the mass of three new objects using the electronic balance.

7. Turn balance on.
8. Place the piece of filter paper on the pan.

Answer Key

9. Tare (reset) the balance to 0.

10. Place object(s) on the paper.

11. Record the mass on the data table.

Object	Mass (g)

(mass amounts may vary)

Finding Volume

Which is larger? Choose one answer for each pair.

A. 2 quarts or 2 pints of milk
B. 1 liter or 1 gallon of tea
C. 10 ounces or 10 milliliters of vegetable oil

Answer the following questions.

1. What instrument will we use to find liquid volume?
   Milliliter cylinder _____

2. What is the name of the curve you see at the top of a liquid in a cylinder?
   meniscus _____

3. What is the volume of liquid in each cylinder?(results will vary)

Liquid	Volume (mL)

4. What formula do we use to find the volume of regular objects?
   Volume = _____ht____ × _____wt_____ × _____depth_____

Answer Key

5. What is the volume of the cube sample? (results can vary)
_____ × _____ × _____ = _____

6. How do we find the volume of an irregular object using a graduated cylinder?
_____Fill a 500 ml cylinder half full with water. Drop the irregular object into the cylinder. See how much the increase in the water level is. This is the volume of the object placed into the cylinder.

7. What is the volume of the rock? (results may vary)

_____ – _____ = _____