

Name:

Chalk it Up Lab

I. Purpose: To determine the number of atoms used to draw a picture. (To determine the mass, number of moles, number of molecules, and number of atoms used draw a picture.)

II. Safety: Do not eat chalk!

III. Procedures:

1. Place chalk on balance and record the mass.
2. Draw a picture with the piece of chalk.
3. Measure the mass of the chalk.



IV. PreLab Questions

1. What number does the term “dozen” represent?
2. What number does the term “mole” represent?
3. 1 dozen cookies = _____ cookies
1 mole of cookies = _____ cookies

V. Data and Calculations

Mass of Chalk – Initial (g)	
Mass of Chalk – Final (g)	

VI. Conclusion Questions

1. Calculate the mass of chalk used to draw the picture.
2. Calculate the molar mass of the chalk. The chemical formula for chalk is CaCO_3 .
3. Calculate the number of moles of chalk used to draw the picture.
4. Calculate the number of molecules of chalk used to draw the picture.
5. Calculate the number of atoms used to draw the picture.
6. Write the number of atoms used to draw the picture on the bottom of the picture and turn it in.

VII. Write a conclusion statement for this lab (on graph paper) and attach to this lab handout.