

## How many molecules does it take to write your name on the sidewalk?

Name \_\_\_\_\_

Chalk is calcium carbonate ( $\text{CaCO}_3$ ). In this lab you will write your name with a piece of chalk on the sidewalk and determine how many molecules are stuck to the sidewalk.

Mass of chalk before writing name	
Mass of chalk after writing name	
Mass of chalk on the sidewalk	

1. If you had 1.00 moles of  $\text{CaCO}_3$ , what would its mass be? (Show all work!)
2. How many **moles** of  $\text{CaCO}_3$  are in your name on the sidewalk? (Show all work!)
3. How many **molecules of  $\text{CaCO}_3$**  are in your name on the sidewalk? (Show all work!)
4. How many **total atoms** are in your name on the sidewalk? (Show all work!)
5. How many **oxygen atoms** are in your name on the sidewalk? (Show all work!)