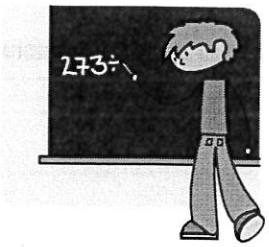
MOLES OF CHALK LAB



Purpose: to determine how many moles of chalk it takes to write your name. To determine how many chalk molecules it takes to write your name.

Background: A mole is a counting unit used in chemistry to measure quantities of particles.

Hypothesis: Make a prediction about the number of moles of chalk it takes to write your name.

Procedure:

1. Weigh your piece of chalk to 2 decimal places on the balance. [Record in data table]
2. Write your name with the chalk.
3. Weigh the chalk again. . [Record in data table]
4. Determine the # of moles of chalk used. [Record in data table]

1. Weight of chalk before writing name	
2. Weight of chalk after writing name	
3. Grams of chalk used to write name	
4. Moles of chalk used to write name [*see Part B]	

What is the molar mass of chalk (calcium carbonate) in g/mol? SHOW CALCULATIONS.

Part B

To find the number of moles of chalk (calcium carbonate) used to write your name you will need the grams of calcium carbonate used to write your name and the molar mass of calcium carbonate from above. Show your work below.

_____ moles of calcium carbonate to write your name
[*Record in data table]

Analysis: Is your answer for the number of moles of calcium carbonate in your name reasonable? Explain why or why not.

Find the number of calcium carbonate compounds used to write your name. Show calculations below.

Analysis: Is your answer for the number of calcium carbonate compounds used to write your name reasonable? Explain why or why not.

Conclusion: Does it take more grams or more moles to write your name?

What does this tell you about the relationship between grams and moles?