Moles of Chalk

Performance Task

PROBLEM

Create and execute a lab procedure to determine the mass of chalk (calcium carbonate, $CaCO_3$) used when writing your name outside on the sidewalk and use that mass to determine the mass of calcium, carbon and oxygen used.

Part 1 - Lab Design

You get 2 free questions per group. The rest will cost points.

Bring your completed procedure, materials, and data table up to the teacher for approval and chalk selection.

Problem: Create and execute a lab procedure to

- Determine the mass of chalk (calcium carbonate, $CaCO_3$) used when writing your name outside on the sidewalk
- Determine the mass of calcium used
- Determine the mass of carbon used
- Determine the mass of oxygen used.

You must create

- A detailed procedure that specifies what you are doing, how you are doing it, and what needs to be recorded and calculated (Ex. calculate moles of calcium carbonate by converting g $CaCO_3$ into mol $CaCO_3$)
- List ***all*** materials you will use
- A data table for the masses and moles you determine or measure.

Part 2 - Lab Execution

You will follow your lab procedure to perform the lab.

If you make any changes, record it in a different color on your handout. You will not be penalized for it.

When you are finished, get ready for part 3.

Part 3 - Data Analysis

Use your data about the mass of Calcium Carbonate (chalk, $CaCO_3$) used to determine the mass of calcium, carbon and oxygen used.

Follow your procedure and use the math techniques we have been practicing.

You get 2 free questions per group. The rest will cost points.

Finishing

Turn in to your teacher when completed. Make sure you finish all parts.

Work on class work when done.