**Molar Mass Chalk Lab**

**Purpose**

• Visualize the concept of the mole

• Gain experience in calculating grams and moles

**Materials**

• A piece of chalk

• Electronic balance, if available

• Periodic Table

• A calculator

**Instructions**

1. Take a chunk of chalk and measure its mass on the balance: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Go outside and draw something on the sidewalk.

3. Weigh the unused chalk: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Based on the initial mass of the chalk and the mass at the end, calculate how many grams of chalk you left

out on the sidewalk:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Look up the molecular formula for chalk: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Calculate the following:**

|  |  |
| --- | --- |
| Chalk Molar Mass | Moles of chalk left on the sidewalk |
| Molecules of chalk left on the sidewalk | Atoms of Calcium left on the sidewalk |
| Atoms of Oxygen left on the sidewalk | Atoms of Carbon left on the sidewalk |