

# EXPERIMENT NO. I

# ELECTRONIC BALANCE

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# INTRODUCTION

- Electronic balances have become standard equipment for many high school and college departments.
- They allow the user to **quickly** and **accurately measure** the mass of a substance to a **level of accuracy** impossible for traditional balances to achieve.
- This is especially important in **experiments that require precise amounts** of each substance to achieve the desired results.
- The popularity of the electronic balance is also due to its **extreme ease of use for any skill level.**

# HOW TO USE AN ELECTRONIC BALANCE

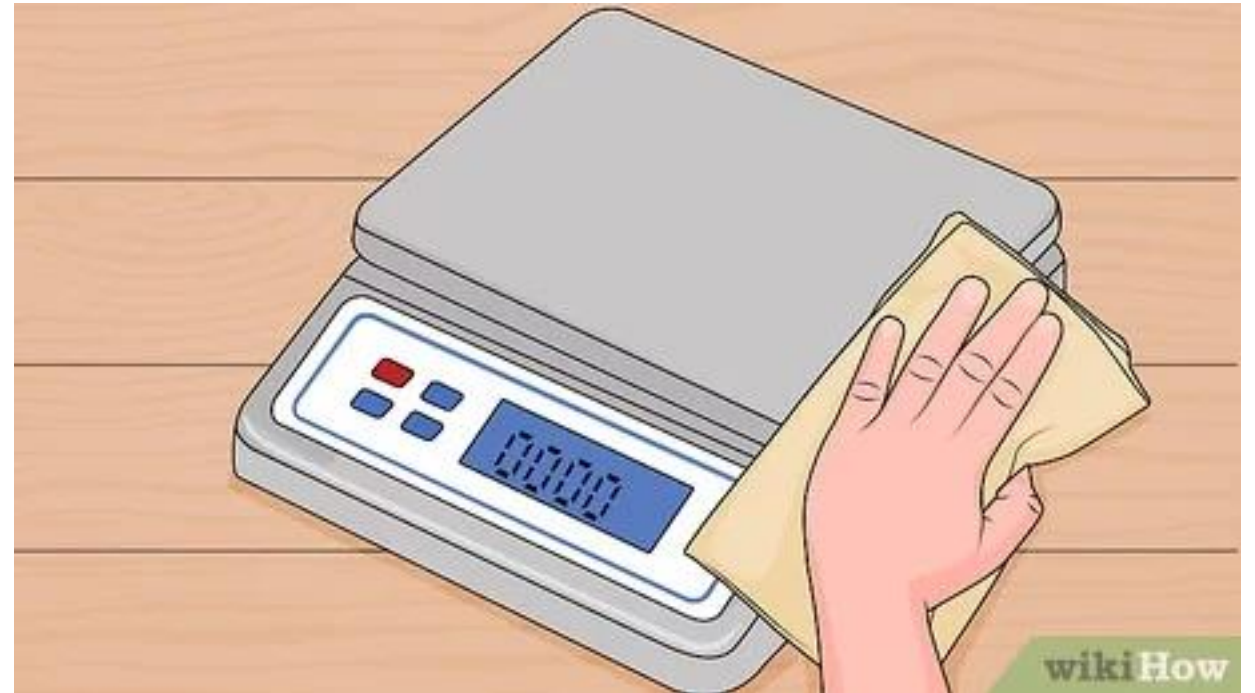
1-Read carefully the manufacturer's instructions.

2- Place the electronic balance on a **flat, stable surface** indoors. **The precision of the balance** relies on minute factors and **wind, shaky surfaces**, or similar forces will cause the readings to be inaccurate.



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2- **clean the surface** of the balance before using because **Fingerprints** and other **greases** from your hands **add mass** and must be avoided for accurate measurements. , then Press the "ON" button and wait for the balance to show zeroes on the digital screen.



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- 3- **Use gloves** to place the **empty container** you will use for the substance to be measured on the balance platform.



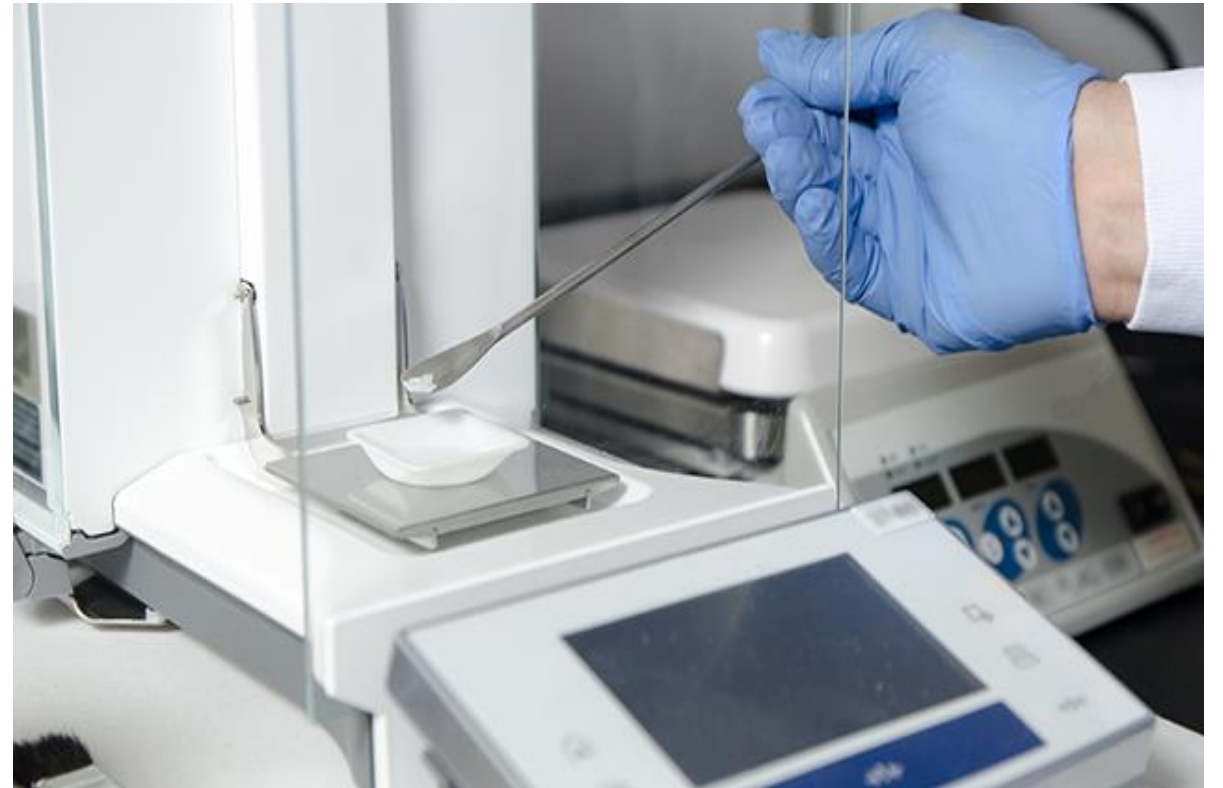
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- 4- Press the "Tare" or "Zero" button to automatically deduct the weight of the container from future calculations. The digital display will show zero again, indicating that the container's mass is stored in the balance's memory.



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- 4- Carefully add the substance to the container. Ideally this is done with the container still on the platform, but it may be removed if necessary. Avoid placing the container on surfaces that may have substances which will add mass to the container such as powders or grease.



# HOW TO USE AN ELECTRONIC BALANCE

- 5- Place the container with the substance back on the balance platform if necessary and record the mass as indicated by the digital display. Then you must press ( OFF) button to shut down the device .





