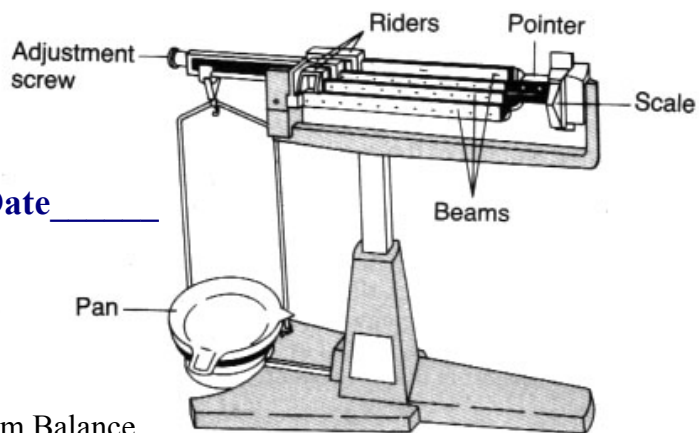


Triple Beam Balance



LP: _____ Date _____

Objectives:

- to learn the correct way to use a Triple Beam Balance
- to learn the parts of a TBB
- to take precise measurements when finding the mass of an object
- to find the mass of known and unknown quantities

Materials:

- Film canisters labeled A - Z filled with different masses.
- Sets of Brass weights 200, 100, 50, 20, 10, 5, 2, & 1 gram
- Triple Beam Balances

Procedure:

1. Listen and watch carefully to the demonstration on how to use the Triple Beam Balance.
2. You and your partner will share a triple beam balance.
3. Check to see that the Pointer is pointing to zero.
4. If it is not, check to see that all the Riders are all the way to the left at the Zero mark.
5. Adjust the balance by turning the Adjustment Screw slowly until it points to zero.
6. Place the known brass weights onto the pan and practice measuring until you are comfortable using the balance beam. Start with the largest mass, 200 g, and work your way down to the smallest mass, 1 g.
7. Find the mass of the unknown film canisters.
8. Record canister letter and mass in Table 1.

Data:



Table 1: Mass of unknown film canisters in grams.

Canister Letter					
Grams (g)					

Analysis and Results:

1. How should you hold a triple beam balance?

2. Why should your balance say zero before you place an object in the pan?

3. What canister had the largest mass? Letter _____ with _____ grams

4. Was it easier to find the mass of an object with a lot of mass or a little amount of mass? Explain.

5. Should our balance beam be renamed to a "Quadruple Beam Balance" - Explain.

Conclusion: 2 - 3 complete sentences on what you learned.

