Name: Date: Class Period

How to Correctly use a Triple Beam Balance

How to use a microscope

Video Link: https://youtu.be/BJvVxvya3Z4

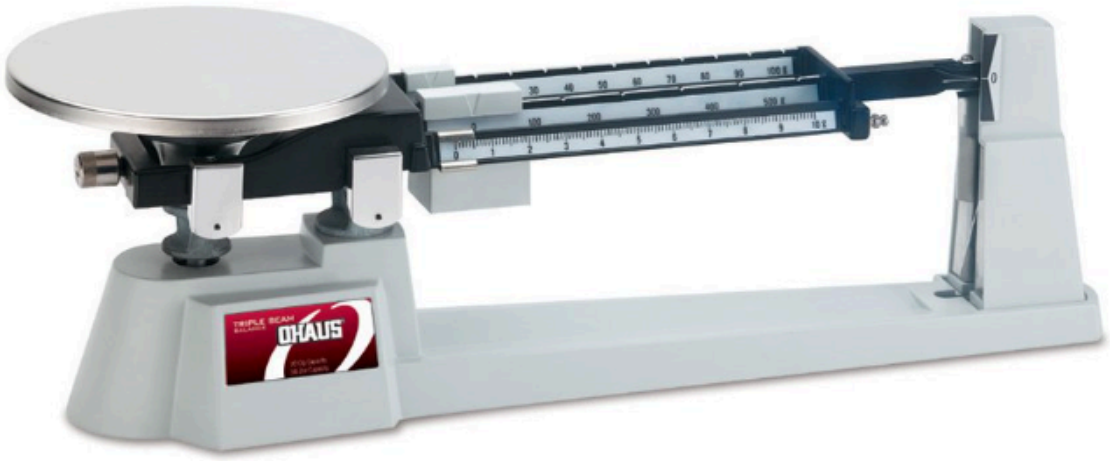
Student Notes:

The triple beam balance gets its name from its three different _____. When the tool _____ you are ready to take a measurement.

What exactly does the triple beam balance measure? It measures _____ (the amount of matter in an object). Don't make the beginner mistake of thinking that it measures _____. The triple beam balance measures _____!

In the space below draw arrows and correctly label the following parts of the TBB

pan/platform, two notched beams, one smooth beam, sliding masses, pointer, scale, zero line, zero adjustment knob



Ohaus - 80000012 Specialty Mechanical Triple Beam Balance, with Stainless Steel Plate, 610g Capacity, 0.1g Readability

Flip over →

Student notes continued:

A really important first step -that some people aren't aware of- is to _____ the triple beam balance. Begin by sliding all of the masses all of the way to the _____ and check to see if the pointer lines up with the zero _____. This is where the zero _____ comes into play. Turn the knob clockwise to make the pointer _____ and counterclockwise to make the pointer _____. Adjust the knob until the pointer lines up exactly with the _____ line.

Place the item you want to measure the mass of in the _____ of the pan. Notice how the pointer rises above the zero line. The goal is to make the pointer line up with the zero line by moving the _____, but there is a very particular way you have to move them. You always start with the _____ mass. Slide it until it drops into the next notch. Never stop the large or medium masses _____ the notches or you will never get an accurate measurement! If the pointer is still above the zero line, move the large mass to the _____ notch. Once the pointer drops below the zero line, move the large mass back _____ full notch. Now repeat the same procedure for the _____ sized mass. Notice that there are no _____ in the smallest beam. This is because you can move the smallest mass _____ you need to in order to make the pointer line up with the zero line.

Reading the triple beam balance is actually quite simple. It's just basic _____. The largest mass gives you the value for the _____ place, the medium mass gives you the value for the _____ place and the smallest mass gives you the value for BOTH the _____ and the tenths place. A key amateur mistake is to forget that you get _____ numbers from this last and smallest mass.

Write the mass from the first example here _____
Write the mass from the second example here _____
Write the mass from the third example here _____

*Did you remember to use the correct units?