

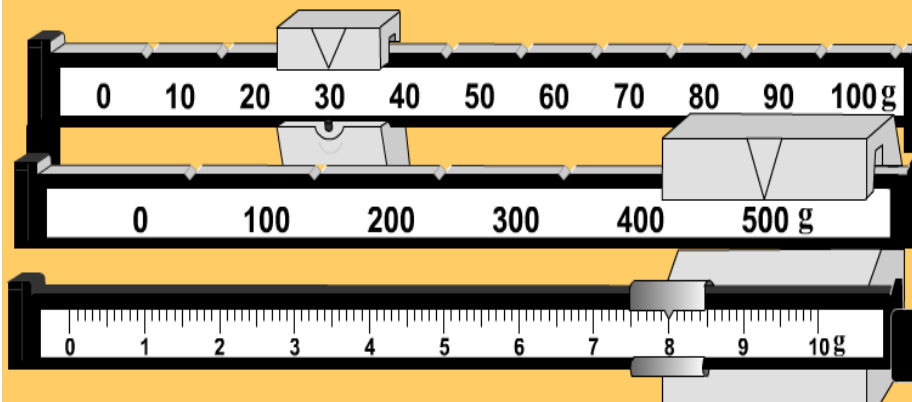
## ACTIVITY 1: HOW TO READ A TRIPLE BEAM BALANCE

- ❖ We use a balance to measure mass.
- ❖ **Mass** is the amount of matter in an object.



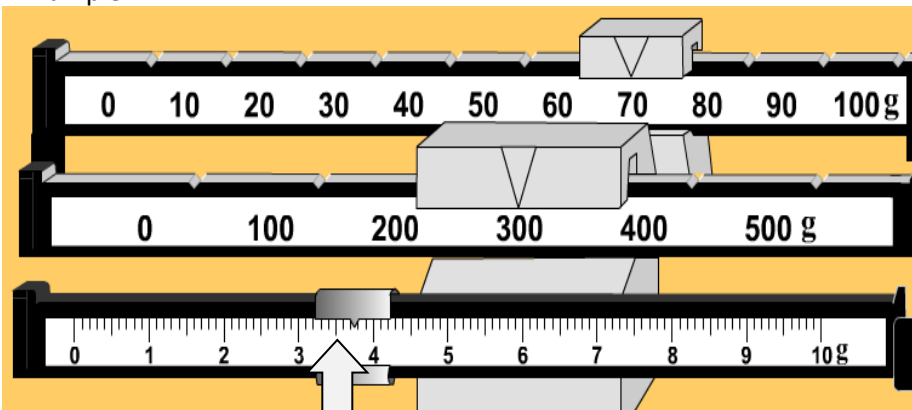
Study below how to read a triple beam balance.

Example 1



|   |       |  |
|---|-------|--|
| <b>Step 2:</b><br>Read the 10's<br>30 grams   | → 30  | <b>Step 4:</b><br>Add the 3 numbers together.<br>$\begin{array}{r} 500 \\ 30 \\ + 8 \\ \hline 538 \end{array}$<br>Total: 538 grams |
| <b>Step 1:</b><br>Read the 100's<br>500 grams | → 500 |  |
| <b>Step 3:</b><br>Read the 1's<br>8 grams     | → 8   |  |

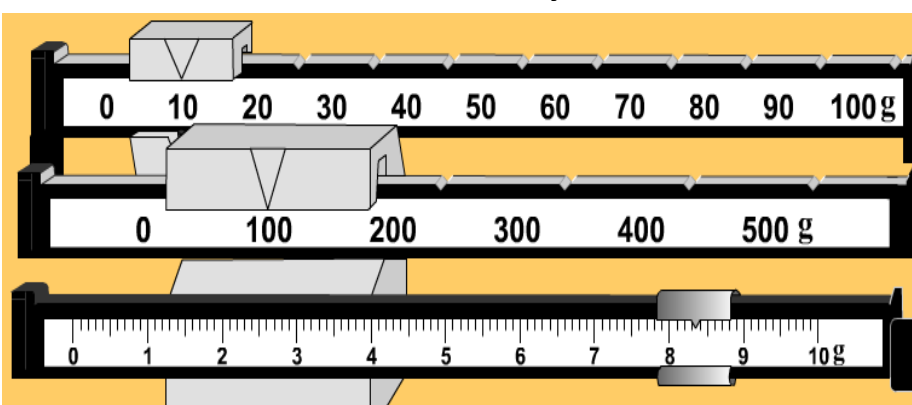
Example 2



Count the tick marks to get the decimal.

|  |       |  |
|--|-------|--|
| <b>Step 2:</b><br>Read the 10's<br>70 grams                    | → 70  | <b>Step 4:</b><br>Add the 3 numbers together.<br>$\begin{array}{r} 300.0 \\ 70.0 \\ + 3.8 \\ \hline 373.8 \end{array}$<br>Total: 373.8 grams |
| <b>Step 1:</b><br>Read the 100's<br>300 grams                  | → 300 |  |
| <b>Step 3:</b><br>Read the 1's<br>and the decimal<br>3.8 grams | → 3.8 |  |

**Solve this one on your own!**



|  |   |   |
|--|---|---|
| <b>Step 2:</b><br>Read the 10's<br>___ grams                   | → | <b>Step 4:</b><br>Add the 3 numbers together.<br><br>Total: ___ grams |
| <b>Step 1:</b><br>Read the 100's<br>___ grams                  | → |   |
| <b>Step 3:</b><br>Read the 1's<br>and the decimal<br>___ grams | → |   |

## ACTIVITY 2: USING THE REAL TRIPLE BEAM BALANCE



1. Take out the triple beam balance and place it on a level surface.
2. Check to see that the balance is level. The 100's, 10's, and 1's riders should all be at 0.
3. Place one pencil onto the pan of the triple beam.
4. Move the biggest 100's rider along its beam one notch at a time until the pointer drops.
5. Move the rider back one notch.
6. Repeat steps 4 and 5 with the 10's rider.
7. Repeat steps 4 and 5 with the 1's rider.
8. Add up the masses like you did in Activity 1.
9. Write down the mass of the pencil in the data table below.
10. Repeat the same procedure for the other objects listed in the data table.

| <b>Object</b>                         | <b>Mass<br/>(in grams)</b> |
|---------------------------------------|----------------------------|
| Pencil                                |                            |
| Book                                  |                            |
| Rock                                  |                            |
| Marker                                |                            |
| You pick an object.<br>Write it here: |                            |

Answer to triple beam  
question on previous page:

**118.4 grams**