## Using a microscope:

1. <u>Carry with 2 hands.</u> Person with the equipment has right of way.

2. <u>Do not tilt</u> the microscope.

3. <u>Look without holding</u> the eyepiece. (it strips the gears & won't stay in focus.)

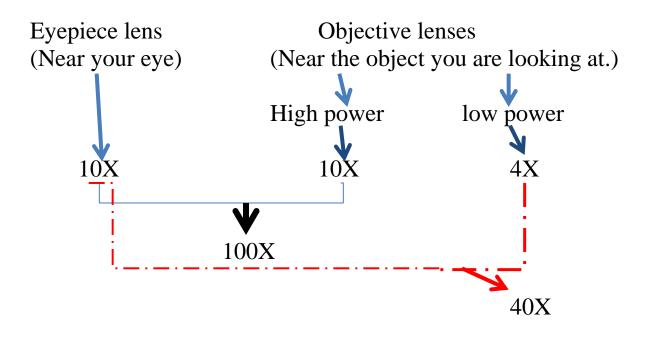
4. Find object on <u>low power first.</u> (Center it & focus using the big knob. Fine tune the focus with little knob.)

5. Use only the <u>fine focus with high power</u>.

6. To store:; turn to <u>low power</u> and put in <u>lowest position</u>; <u>wrap cord</u> loosely & <u>cover</u>.

## Microscope magnification-

We use compound microscopes: this means they have more than one lens that you look through.



Something that is magnified 100x looks, 100 times larger than it really is.

When using more than one lens the magnification is multiplied. For example using a 10x and 20x together gives you 200 times

magnification.

## Drawing under a microscope-

- Start with field of view circle. 4" works well
- Drawings must be NEAT & in pencil.
- Label the kingdom, organism, and magnification.
- Scan the objects looking at shape only.
- Choose <u>one</u> that has a "typical shape."
- Draw the <u>outline</u> to scale in the circle.
- Look inside the organism what details jump out at you? Draw major details - enough to get the message across but not so much that you loose the critter in the clutter. (It is sort of like doing a chalk drawing of a cat. If you try to draw every hair pretty soon it looks like a hairball instead a cat.)
- Scan the perimeter of the critter. Are there any tails (flagella), hairs (cilia), etc.?
- Label organelles and other structures. Use straight lines