

How To Use A Simple Compound Microscope

1. Handle with care! When carrying the microscope, grasp the *arm* with one hand while supporting the *base* with the other.

2. Position the microscope on a steady table near a good source of light. If possible, tilt the *ocular tube* so that you can get a clear view through the microscope without leaning over the *eyepiece*.

3. While looking at the microscope from the side, practice turning the *coarse* and *fine adjustment knobs* to see how they move the lens up and down. Raise the lens as far as possible.

4. Turn the *objective lenses* so that the microscope is set at the lowest power (probably 10X). Always start your observations with this lens. It allows you to see more of the object so that you can locate the part you want to observe more closely.

5. If the microscope has an *aperture*, open it fully. While looking through the eyepiece, tilt the *mirror* to reflect the maximum amount of light through the lens. You should see a white circle.

6. Place a prepared slide on the *stage* so that the part you want to look at is positioned over the hole and under the lens. Hold the slide in place with the *stage clips*.

7. While looking at the microscope from the side, turn the *coarse adjustment knob* to bring the lens down very close to—but not touching—the slide.

****Never lower the lens while looking through the eyepiece. You could hit the slide, breaking it or breaking the lens itself.**

8. Looking through the eyepiece, slowly raise the lens by turning the *coarse adjustment knob*. After the object comes into focus, fine-tune the picture by slowly turning the *fine adjustment knob*.

9. Slowly move the slide around until you find the part of the image you wish to observe.

10. To look at the image in more detail, change to a higher-power objective lens. First raise the lenses. Turn the *nosepiece* to select the higher-power lens. Lower the lens as explained in step 7, and refocus as in step 8.

