* There are different types:
* **Dissecting microscope**-used as a magnifying glass to look at the surface of a specimen usually visual to the naked eye. Example: eye color of fruit fly
* **Electron microscope**-works by using electrons to map the surface of an object, extremely large and expensive.
* **Compound light microscope**- works by passing light through an object to view specimens not seen by naked eye.
* Most commonly used microscope is the Compound light microscope.
* Compound light microscopes need thin sections of specimen such as cells to pass light through them. Large objects prevent light from passing through them.
* Knowing the parts of a microscope prevents communication problems.
* Carry the microscope by placing one hand under the base and other hand supporting the arm.
* Light source may use mirrors or plug in with light switch typically on back of microscope.
* **Total Magnification of Objective lenses**:
* Scanning lens- 4x times 10x nosepiece = 40x
* Low-power objective lens- 10x times 10x nosepiece = 100x
* High-power objective lens- 40x times10x nosepiece = 400x
* Most difficult part of using a microscope-getting object into clear focus.
* There are two knobs located on the arm of microscope, used to focus items:
* **Coarse adjustment knob**- the larger of the two knobs, used to roughly focus items.
* **Fine adjustment knob**-the smaller of the two knobs, used only under high-power objective.
* Coarse adjustment knob-not used under high-power objective-damage slide or microscope.
* Start viewing with scanning objective in focus, move to low-power objective in focus, then move to high-power objective in focus.
* If focus is lost, always go back to Scanning objective to refocus object.
* Adjust diaphragm (usually located under the stage) for brightness.

**Citation:**

Monk, T. [Biology monk]. (2013, October 1). How to properly use a compound light microscope [video file]. Retrieved from <https://youtu.be/PKDj1x3iypt>

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