Jonathan Quang 10/12/14

Biology

Pre-Lab 5

3. Ocular lens: This lens provides a small amount of magnification on its own.  
Nosepiece: The part of the microscope that contains the revolving objective lenses.  
Wide angle objective lens: This lens gives a wider field of view than the other two lenses listed below.  
Low power objective lens: This lens gives more magnification than the wide angle lens. Some slides only require the low power objective lens to see in detail while other slides require the low power objective lens to scan for places of interest.  
High power objective lens: This lens gives the most magnification and is used to see the tiniest of details.  
Diaphragm: This is a rotating disk under the stage the adjusts the intensity and size of the cone of light coming in.  
Coarse adjustment knob: This is used to move the stage up or down to focus on the specimen.  
Fine adjustment knob: This knob is used to fine-tune the focus after using the coarse adjustment knob.

4. The main difference between a compound light microscope and a dissecting scope is that a dissecting scope has smaller magnification because the specimens tend to be larger and that the dissecting scope has two eye pieces to allow for binocular vision.

5a) Magnification deals with how much an object is enlarged while resolution deals with clarity between close but separate objects.  
5b) A higher resolution allows the individual parts of a specimen to be examined separately rather than as a blur.

6) The low power lens should be centered over the stage and lowered until it is 1 cm above the stage. Turn on the power and open the diaphragm. Light on a compound microscope will be adjusted by having the dimmer fully blocking the light. Gradually let more light in until a sufficient level is let in.

7)Lugol's solution is a solution of iodine and potassium iodide in water. It can be used for microscopic staining because when Lugol's solution comes in contact with starch, it stains it in an intense dark blue.