

6B. Oil Immersion

The oil immersion objective is for observing very small organisms. It appears longer than the other objectives and has a magnification of 100X.

- Obtain a prepared slide labeled “human blood smear” and place it on the stage of the microscope. The red blood cells, or erythrocytes, will appear as lightly stained, biconcave disks with a lighter-colored center. White blood cells, leukocytes, will appear large with a dark-stained nucleus.
- Focus and view the specimen under low power. Click the high-power objective into place, focus, and view the specimen (A).
- (B) Carefully swing the high-power objective away from the slide. Place one drop of immersion oil (make sure you that you are using immersion oil) in the center of the viewing area of the slide. Do not use any other objectives with immersion oil, and be careful not to get the oil on anything.
- (C) Click the oil immersion objective into place. The oil- immersion objective will dip into the oil. Focus on the specimen **using the fine-focus adjustment knob only**.



In a blank area on the *MICROSCOPES WORKSHEET* sketch and label the specimen using the oil immersion objective.

Put away the compound microscope properly.

- Turn off the illuminator.
- Clean and dry the objective, ocular lenses, and the slide with a drop of lens cleaner on lens paper.
- Unplug the microscope pulling from the plug, not the cord.
- Wrap the electric cord around the base of the scope.
- Rotate the 4X (scanning objective) into place.
- Use the coarse focus knob to move the stage as close to the objective as possible, locking it in this position with the tension knob if a tension knob is present.
- Center the mechanical stage.
- Place the microscope in the numbered region in the cabinet that coincides with your microscope number. (Be sure to carry the scope with BOTH hands.)