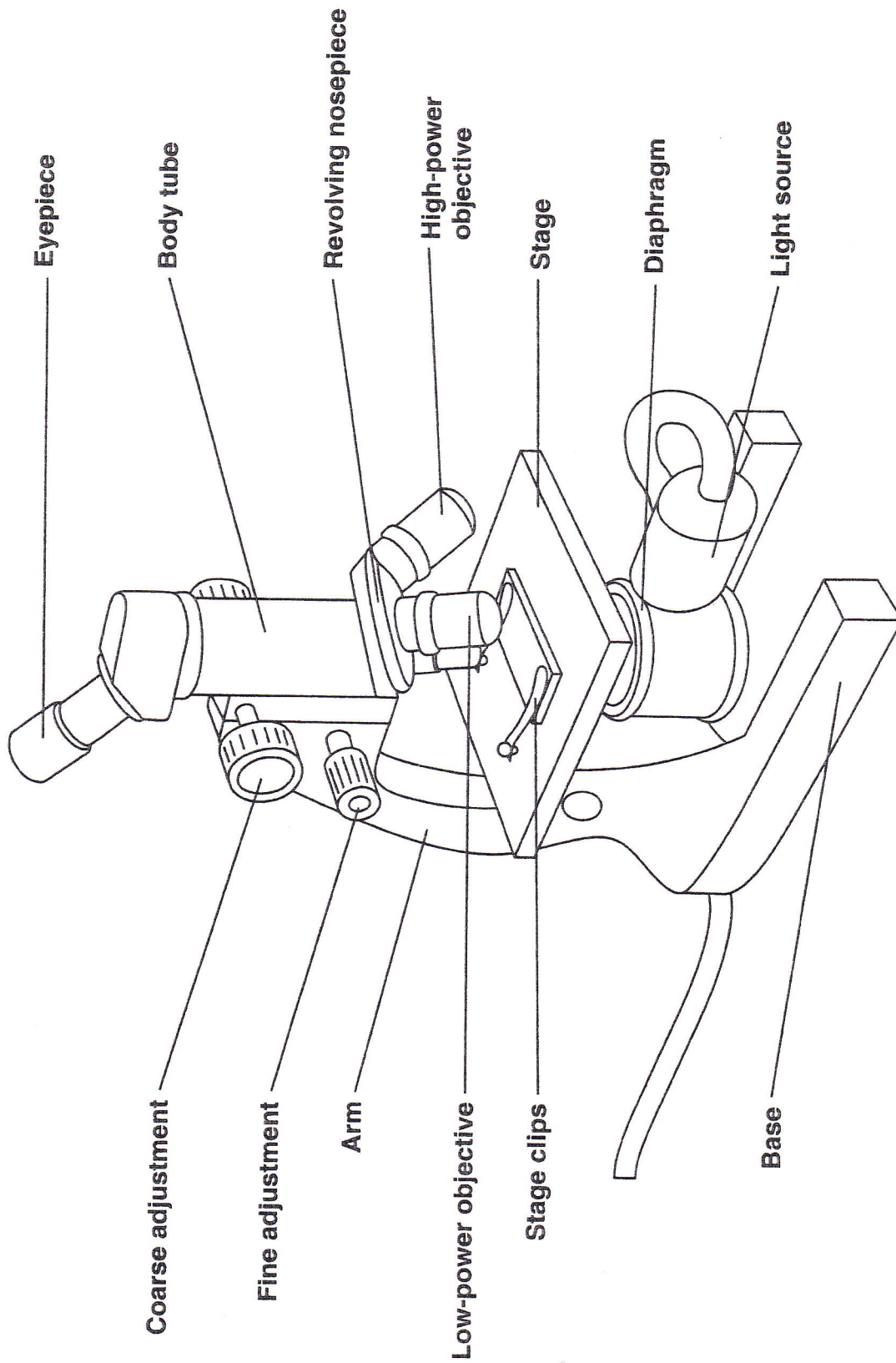


TRANSPARENCY 15 THE OPTICAL MICROSCOPE



Name _____ Hour _____

The Optical Microscope

1. What is the function of the diaphragm? (page 1070) _____

2. If you want to change the objective lens through which you are viewing a specimen, what must you do? (pg. 1070) _____

3. What knob is turned to focus an image under low power (pg. 1070) _____

4. What is the purpose of having a light source on a microscope? _____

5. What is the importance of the term *compound* when describing a modern light microscope? (pg. 26) _____

6. Identify the parts of the microscope that are used for supporting the specimen and hold it in place. (pg. 1070) _____

7. If the magnifying power of an eyepiece is 10X and that of an objective is 45X, by how much is the specimen seen through this combination of lenses magnified? (eyepiece X objective = total magnification) _____
8. What is the fundamental difference between a compound light microscope and the simple microscope that van Leewenhoek used in the 1600s to describe living cells? (pg. 26 and pg. 169)

9. What major advantage does a transmission electron microscope have over a compound light microscope? (pg. 26) _____

10. What major disadvantage does a transmission electron microscope have over a compound light microscope (pg. 26) _____
