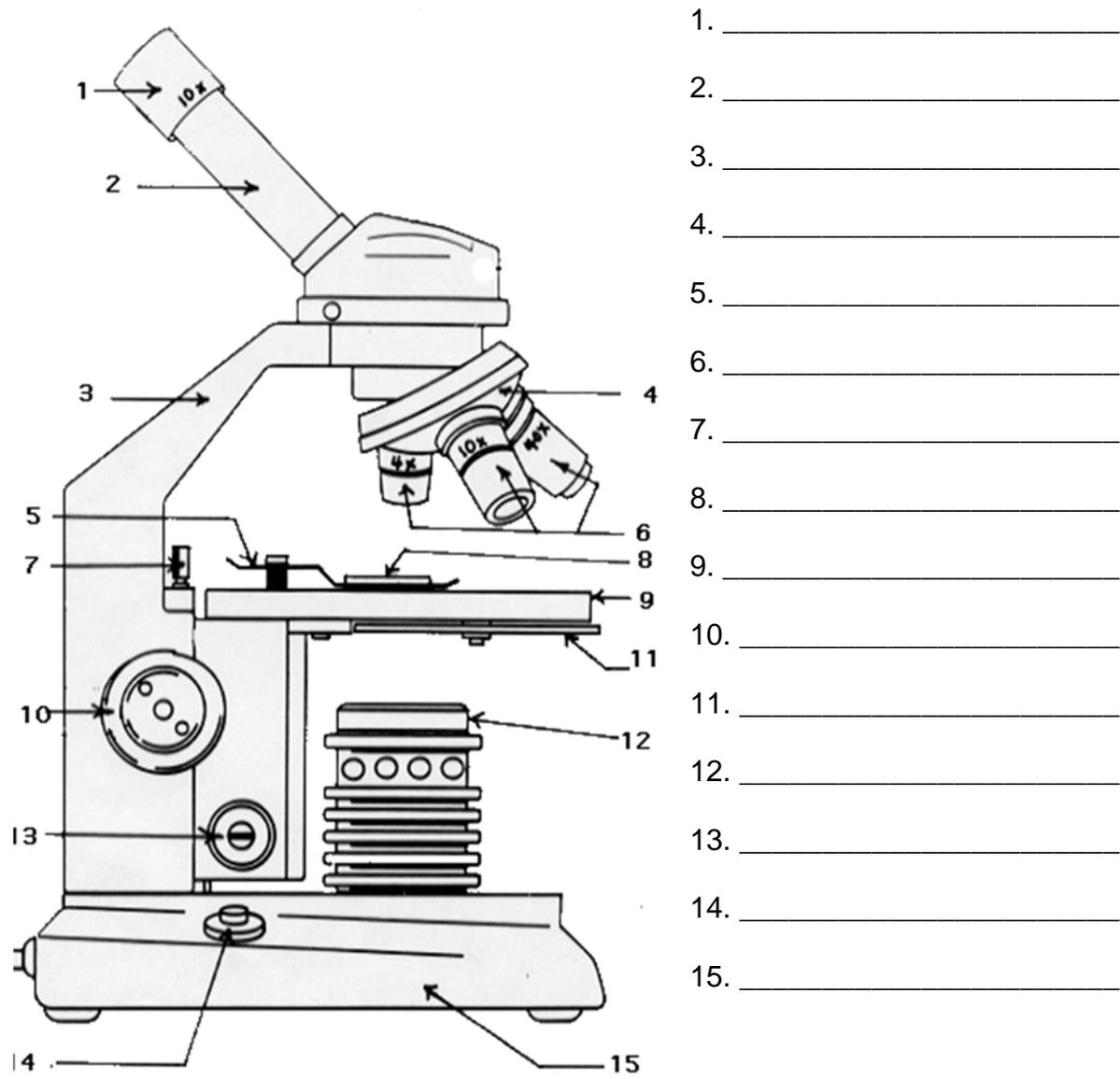


PRE-LAB: Use of a Microscope, The Essential Tool

The most essential tool for the development of the entire field of microbiology was the microscope, which allows microbes to be visualized. In this lab exercise, you will be using a type of instrument called a compound bright-field light microscope.

- 1) BEFORE you come to lab, go online to The Science Spot at <http://sciencespot.net/Media/PartsofLightMicroscope.JPG> **Label all of the parts on the diagram below.** You should be able to name all of the parts and remember how to use them by sight, and also how to calculate the total magnification of the sample by multiplying the ocular magnification by the objective magnification.
- 2) View the excellent instructions for microscope usage at Rice University: <http://www.ruf.rice.edu/~bioslabs/methods/microscopy/microscopy.html> Read how to identify the parts of a scope and how to work them, including the light source, focus adjustment knobs, condenser, and stage. If you want to, feel free to print any parts of the pages above, hole punch and place them in your lab notebook, for future reference.
- 3) You should practice your microscope skills both before and after this week's lab using the University of Delaware Virtual Microscope at <http://www1.udel.edu/biology/ketcham/microscope/scope.html>



Label all parts and be prepared to recognize them on a microscope in the laboratory.