

NAME: _____ BLOCK: _____ DATE: _____

The Compound Light Microscope

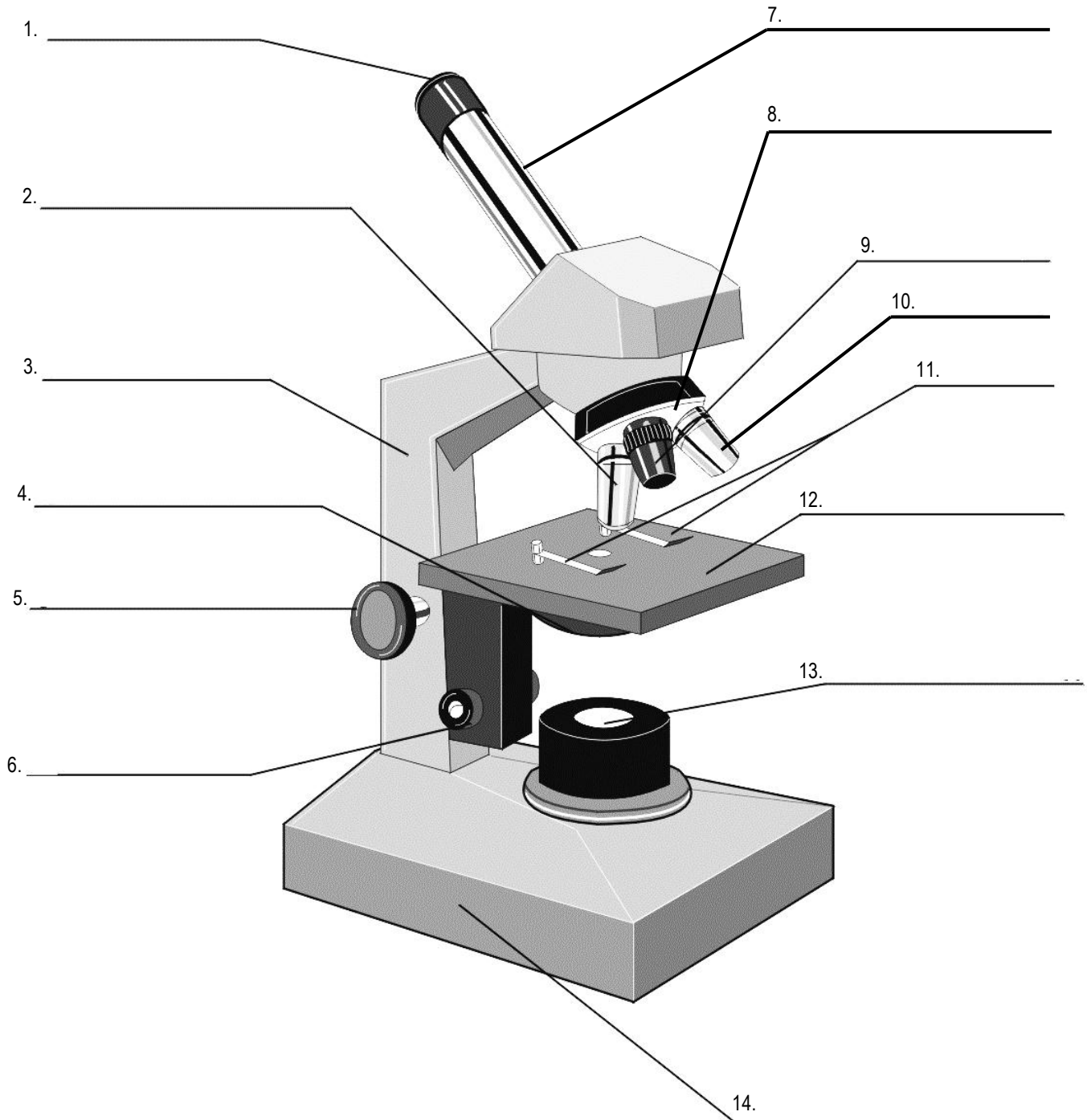
Label the following parts on the diagram:

Fine adjustment knob
Ocular lens
Low power objective lens
Stage Clips

Coarse adjustment knob
Diaphragm
Medium power objective lens
Base

Revolving nosepiece
Body tube
High power objective lens

Light Source
Stage
Arm



Place the letter of the function next to each part on the diagram:

- | | |
|---|--|
| A. contains an eyepiece magnification lens of 10X power | H. moves the body tube only slightly to sharpen the image |
| B. holds the slide in place | I. supports the microscope at the bottom |
| C. supports the body tube; provides a place to grasp the microscope | J. provides a magnification power of 40X |
| D. provides a magnification power of 10X | K. can be rotated to control the amount of light that enters the stage |
| E. moves the body tube freely up and down to focus the image | L. holds the lenses; rotates to change from low to medium to high power |
| F. provides light to view specimens | M. maintains the proper distance between the eyepiece and the objective lens |
| G. provides a magnification power of 4X | N. supports the slide being viewed |

Calculations: Measuring with the Microscope

- It is important to know the dimensions of the object being observed under the microscope.
- To calculate the power of the microscope:
 - Multiply the power of the eyepiece, (10x), by the power of the objective lens used (4x, 10x, 40x)

$$\text{Magnifying Power of Microscope} = \text{Magnifying power of the eyepiece} \times \text{Magnifying Power of the objective}$$

- The magnifying power of the microscope on:

- Low power = _____ x _____ = _____
- Medium power = _____ x _____ = _____
- High power = _____ x _____ = _____

- Complete the following table:

Magnification power of the ocular	Magnification power of the objective	Magnification power of the microscope
10x	4x	
10x		400x
	4x	60x
15x	10x	
10x		100x
	40x	600x