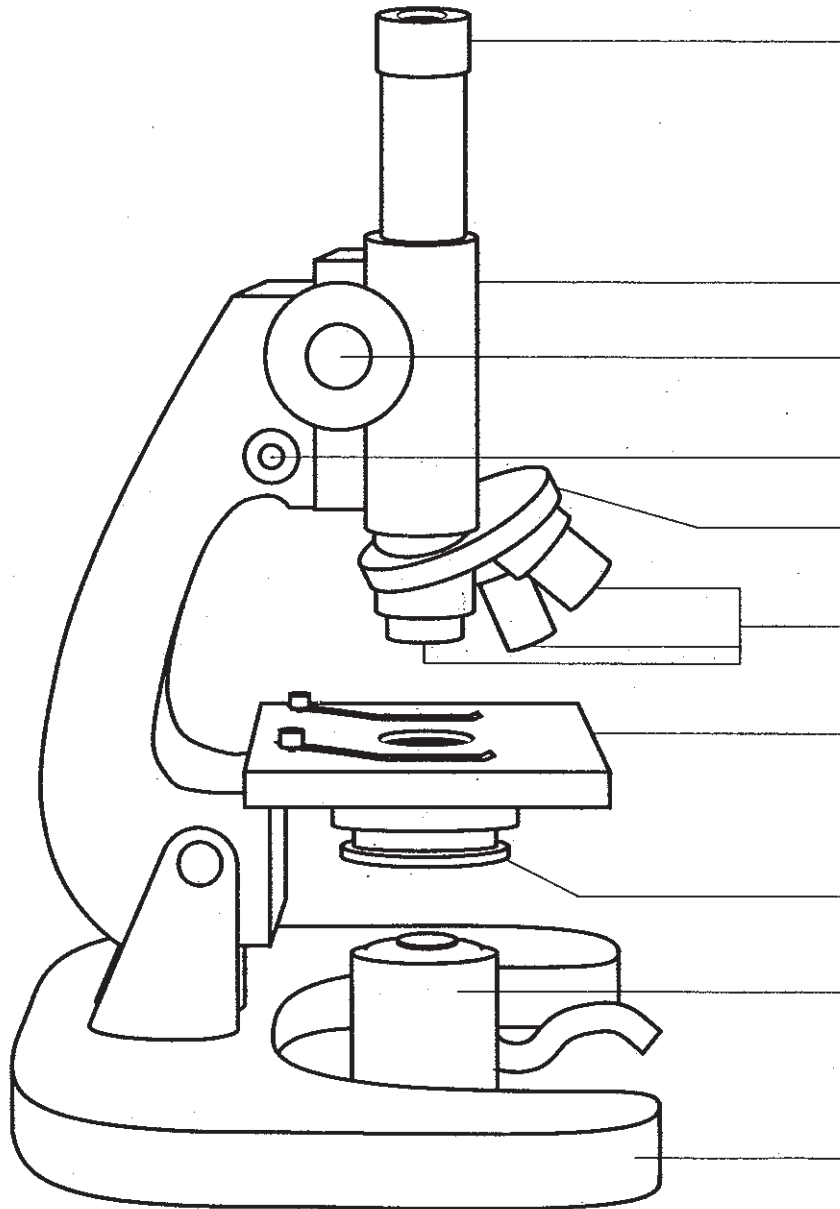


Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Diagram for Labelling: Microscope



Name: \_\_\_\_\_ Date: \_\_\_\_\_

## The Parts of a Compound Microscope and Their Uses

Structure	Function	Careful Use
Arm	Supports the body tube	<ul style="list-style-type: none"> <li>The microscope should be positioned so that the arm faces the viewer to avoid blocking the light.</li> <li>When carrying the microscope, have one hand around the arm and the other hand under the base for firm support.</li> </ul>
Base	Supports the microscope	<ul style="list-style-type: none"> <li>Position the base of the microscope on a firm, level surface.</li> </ul>
Mirror (not shown in the diagram on page 7)	Reflects light rays through the specimen and into the lenses	<ul style="list-style-type: none"> <li>Orient the mirror so that optimum light intensity is achieved.</li> </ul>
Light source	Shines light through the specimen and into the lenses	<ul style="list-style-type: none"> <li>Adjust and position the light so that optimum light intensity is achieved.</li> </ul>
Diaphragm	Different-sized openings control the amount of light that passes through the specimen	<ul style="list-style-type: none"> <li>Rotate the diaphragm to achieve the desired opening.</li> </ul>
Stage	Supports the microscope slide The central opening allows light to pass through the specimen Sometimes there is a lens in this opening	<ul style="list-style-type: none"> <li>Keep the stage wiped clean at all times.</li> </ul>
Stage clips	Secure the position of the slide on the stage	<ul style="list-style-type: none"> <li>These have a tendency to become loose, fall out, and get lost. Make sure they are firmly secured to the stage.</li> </ul>
Nosepiece	Holds the three objective lenses and rotates, allowing the required lens to be moved into position over the specimen	<ul style="list-style-type: none"> <li>Make sure the desired objective lens clicks into position before viewing.</li> </ul>
Objective lenses: Low power Medium power High power	Magnify the specimen Example: L.P. 4X M.P. 10X H.P. 40X Each lens is screwed into a metal tube on which the power of magnification is indicated	<ul style="list-style-type: none"> <li>Use the low power only for initial viewing and focusing of the specimen. This lens should be no closer to the slide than 0.5 cm.</li> </ul>
Body tube (not labelled in diagram on page 7)	Supports the revolving nosepiece and the ocular lens Allows light to pass from the objective lens up through the ocular lens	<ul style="list-style-type: none"> <li>Take care not to bang the body tube against a hard surface when transporting the microscope.</li> </ul>
Coarse-adjustment knob	Moves the body tube up and down for clear focusing of the specimen	<ul style="list-style-type: none"> <li>Use only when focusing under the low-power objective.</li> <li>When using the coarse-adjustment knob, view the microscope from the side to avoid hitting the stage and damaging the slide and/or the objective lens.</li> <li>Focus by moving the lens away from the stage.</li> </ul>
Fine-adjustment knob	Provides a sharper focus of the specimen under the medium- and high-power objectives	<ul style="list-style-type: none"> <li>Use only after the specimen has been located and focused under the low-power objective.</li> </ul>
Ocular lens (eyepiece)	Magnifies the image produced by the objective lens, usually by 5X or 10X	<ul style="list-style-type: none"> <li>Special attention must be given to avoid scratching this lens.</li> </ul>