

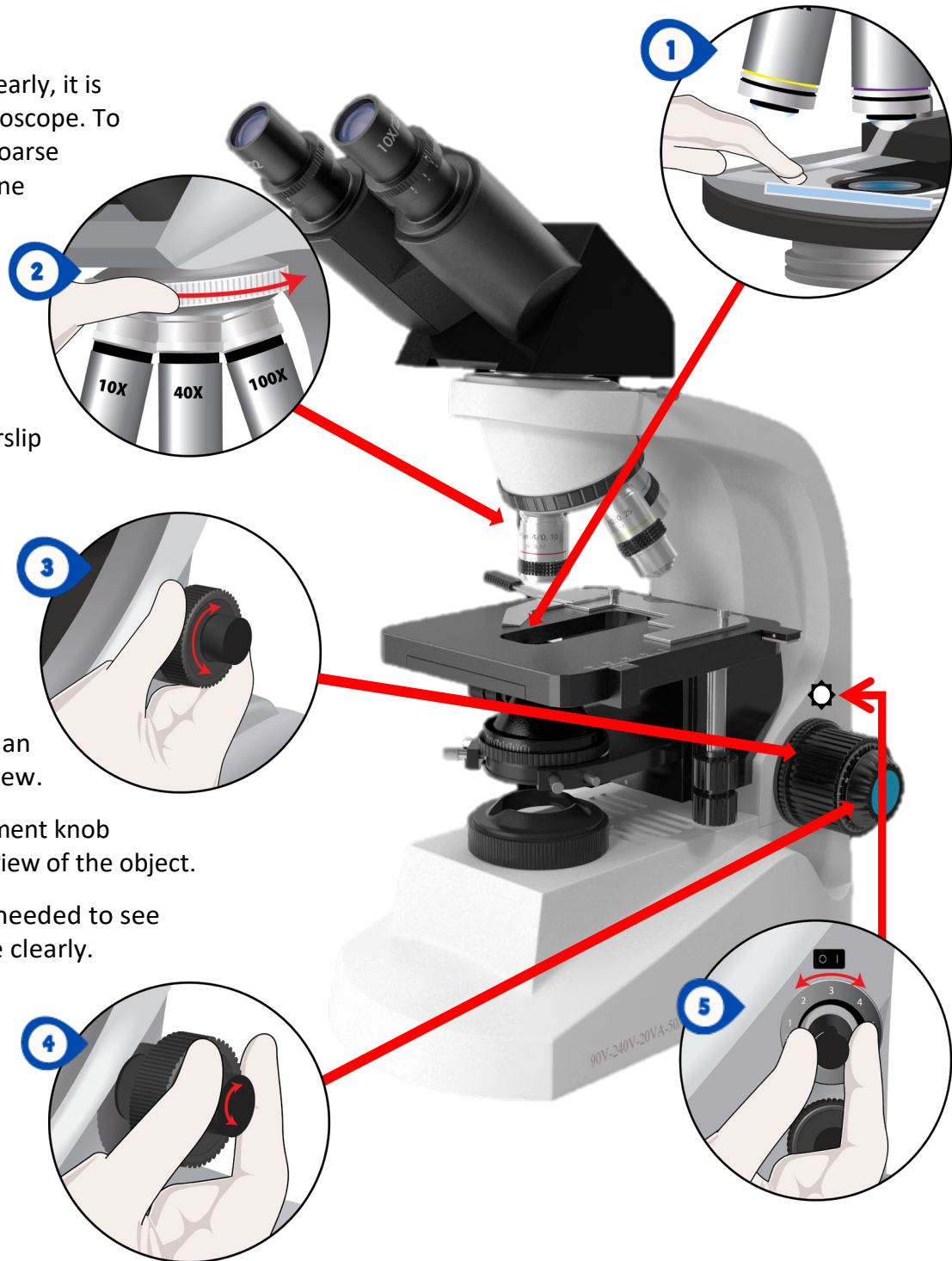
# Focusing the Microscope

## Introduction

To view specimens more clearly, it is necessary to focus the microscope. To change the focus, use the coarse adjustment knob and the fine adjustment knob near the microscope base.

## Instructions

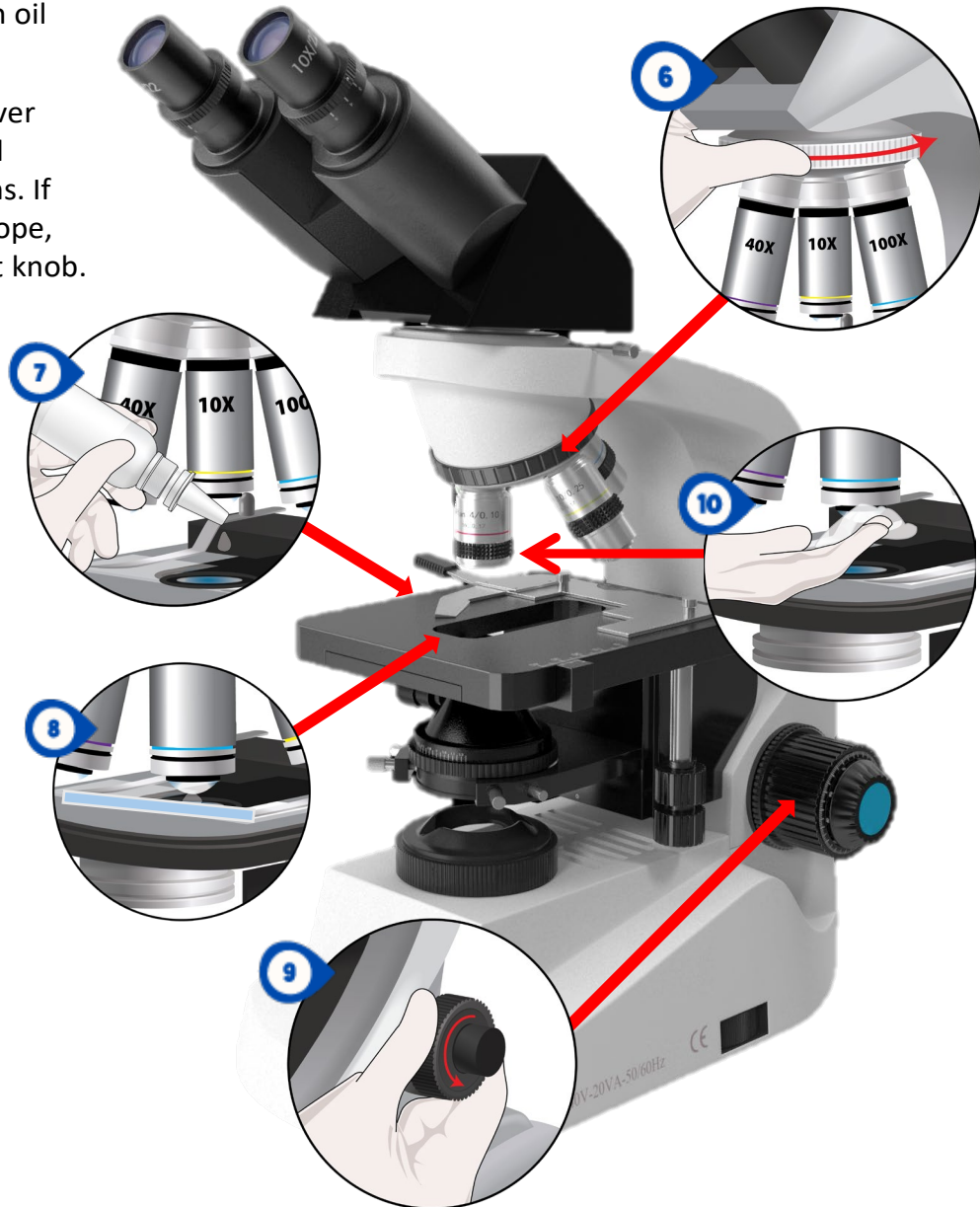
1. Put a prepared slide on the microscope stage with the coverslip on top.
2. Bring the 10X or the 40X objective over the slide.
3. Using the coarse adjustment knob, raise or lower the stage until you see an object come into view.
4. Use the fine adjustment knob to obtain a clearer view of the object.
5. Adjust the light as needed to see the specimen more clearly.



**NOTE: Some laboratory procedures will call for using immersion oil on slides without coverslips. Follow your laboratory's approved procedures.**

This job aid complements the CDC video "[Basic Microscopy - Focusing the Microscope](#)." Find these free resources and others at [reach.cdc.gov/job-aids-resources](http://reach.cdc.gov/job-aids-resources).

6. To use the 100X objective, which requires oil immersion, first focus on the specimen using the 40X objective. Then rotate the objectives so that the slide is between the 40X and 100X objective.
7. Place one drop of immersion oil on the coverslip.
8. Rotate the 100X objective over the specimen. The oil should touch the 100X objective lens. If you have a parfocal microscope, use only the fine adjustment knob.
9. When finished, use the coarse adjustment knob to lower the slide.
10. Use commercial lens paper to dab the oil off the 100X objective.



**Note: Use immersion oil only with objectives made for that purpose. Objectives made for use with immersion oil have labels to identify them. Objectives at 100X tend to use immersion oil, but some 40X objectives might use it as well. Check labels before using immersion oil. Immersion oil can damage other objectives.**

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