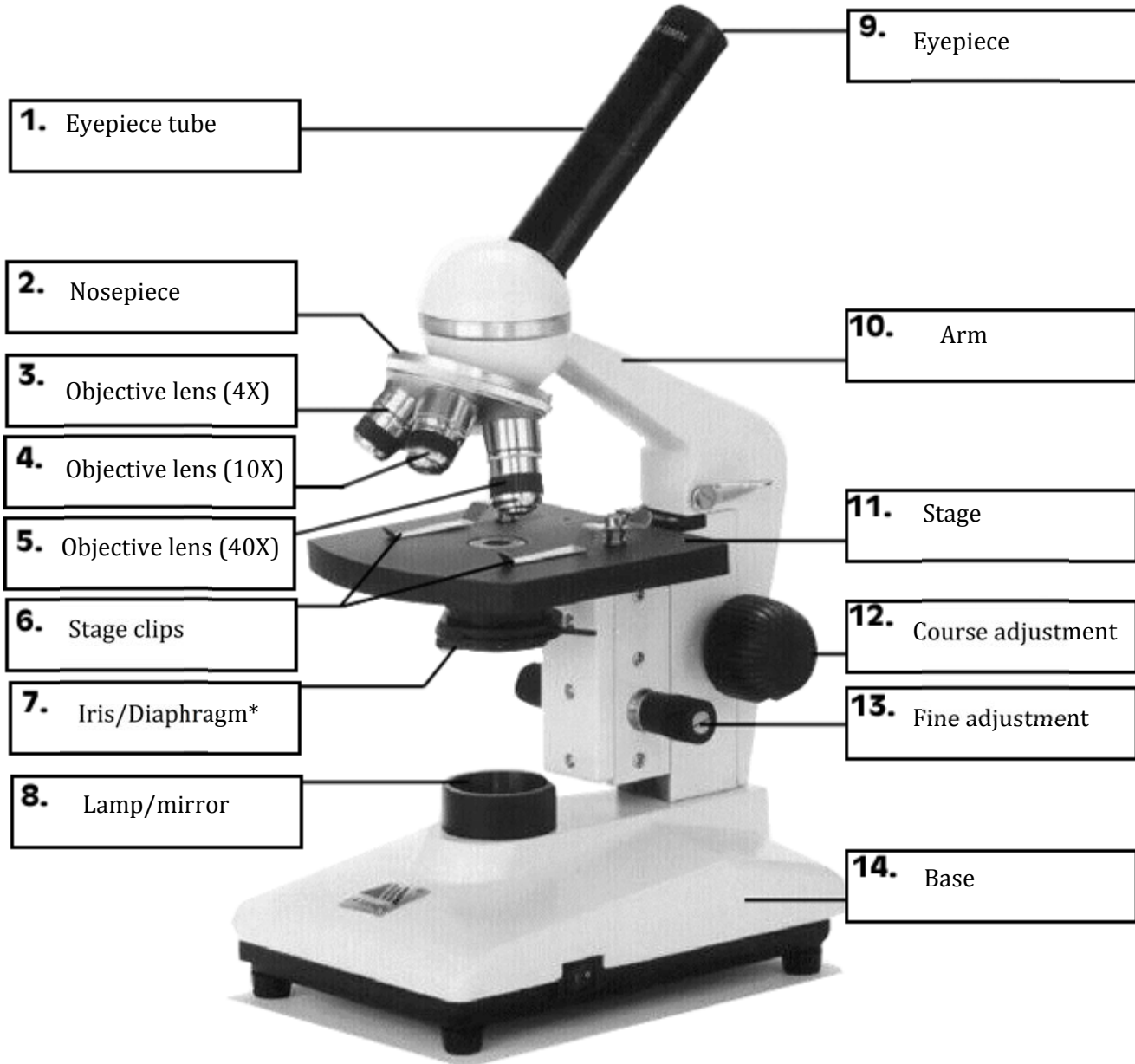


Life Science Grade 3 Quiz

Teacher's Answer Key

Note: If your student doesn't answer all of these correctly, don't worry! Consider it part of their learning experience and help them fill in the gaps.

1. Write the names for each part of the microscope in the image below:



*The hole in the middle of the stage is the *aperture* and the round disk under the stage with different sizes of holes is the *diaphragm*. The one shown in the image above is called an *iris* which is a different design but does the same thing as a diaphragm (changing the amount of light that passes through to the slide).

Answer the questions below:

1. What is the name of a small piece of plastic that is used to hold objects to the microscope slide?(coverslip)
2. Name the chemical solution used to darken cells so that they are easier to see. (stain)
3. Why is there a hole in the middle of the stage? (to allow the light from the mirror or lamp below to shine through the iris)
4. What are the four things you need for a proper microscope drawing? (refer to answers below)
 - a. Title
 - b. Boundary (circle drawn to represent the field of view)
 - c. Drawing of the Object
 - d. Power of magnification
5. Find the power of magnification for viewing with a 10X eyepiece and a 40X objective. ($40 \times 10 = 400$)
6. What is the correct order for the directions below on using a microscope? Place a number in the space next to the step so that they are in proper sequence:

2. Place the slide over the aperture on the stage

1. Use the coarse adjustment knob to lower the stage or raise the eyepiece all the way

4. Look into the eyepiece

3. Set the microscope on the lowest power

5. Use the coarse adjustment knob to bring the object into focus

7. When would you use a heat fix technique for making a slide?

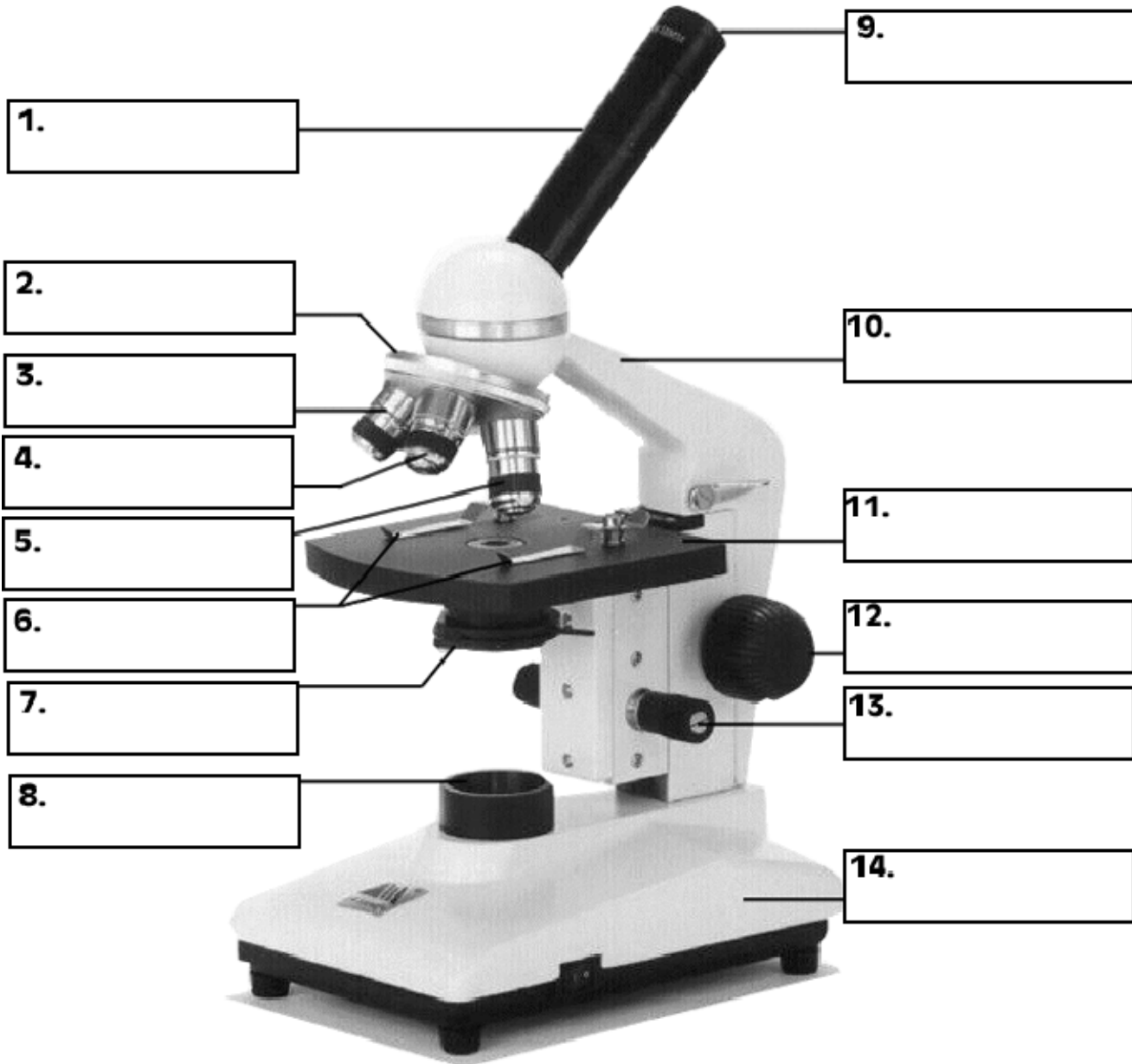
For cells or organisms that move, it allows you to keep it in one place for easier viewing and staining.

8. What are the things you need to do in order to make a heat fix slide?
 - a. Place the specimen on the slide.
 - b. Wave the slide over a candle to dry out the cells.
 - c. Add a drop of stain to the slide.
 - d. After ten seconds, rinse the slide with water by passing it gently through the stream once.
 - e. Place a drop of water on the slide and add a cover slip.

Life Science Grade 3 Quiz

Student Quiz Sheet

9. Write the names for each part of the microscope in the image below:



Answer the questions below:

1. What is the name of a small piece of plastic that is used to hold objects to the microscope slide?
2. Name the chemical solution used to darken cells so that they are easier to see.
3. Why is there a hole in the middle of the stage?
4. What are the four things you need for a proper microscope drawing?
 - a.
 - b.
 - c.
 - d.
5. Find the power of magnification for viewing with a 10X eyepiece and a 40X objective.
6. What is the correct order for the directions below on using a microscope? Place a number in the space next to the step so that they are in proper sequence:

___ Place the slide over the aperture on the stage

___ Use the coarse adjustment knob to lower the stage or raise the eyepiece all the way

___ Look into the eyepiece

___ Set the microscope on the lowest power

___ Use the coarse adjustment knob to bring the object into focus
7. When would you use a heat fix technique for making a slide?
8. What are the things you need to do in order to make a heat fix slide?