





10) As the user switches to a higher-power lens to increase total magnification, the field of view \_\_\_\_\_.

- A) decreases
- B) decreases 4×
- C) increases
- D) remains the same

Answer: A

Learning Outcome: 2.5

Bloom's Taxonomy: Applying/Analyzing

## 2.2 Post-lab Questions

1) Calculate the total magnification of a specimen if the magnification of the ocular lens is 10× and the magnification of the objective lens is 45×.

- A) 450×
- B) 4.5×
- C) 45×
- D) 4500×

Answer: A

Learning Outcome: 2.1

Bloom's Taxonomy: Applying/Analyzing

2) The ability to distinguish close objects as separate and distinct is known as \_\_\_\_\_.

- A) working distance
- B) field of view
- C) resolving power
- D) depth of field

Answer: C

Learning Outcome: 2.2

Bloom's Taxonomy: Remembering/Understanding

3) The coarse and fine adjustment knobs are used to \_\_\_\_\_.

- A) nosepiece
- B) make initial and subsequent focusing adjustments when viewing a specimen.
- C) secure the specimen on the stage
- D) illuminate the specimen

Answer: B

Learning Outcome: 2.1

Bloom's Taxonomy: Remembering/Understanding

- 4) As the coarse adjustment knob is turned, the stage (or in some cases the nosepiece) \_\_\_\_\_.  
A) remains stationary  
B) moves forward or backward  
C) moves up or down, depending on the direction that the knob is turned  
D) moves left or right, depending on the direction that the knob is turned

Answer: C

Learning Outcome: 2.1

Bloom's Taxonomy: Applying/Analyzing

- 5) As the resolving power of the objective lens increases, the working distance \_\_\_\_\_.  
A) increases  
B) decreases  
C) increases by a factor of 10  
D) remains the same

Answer: B

Learning Outcome: 2.2

Bloom's Taxonomy: Applying/Analyzing

- 6) If the microscope is not parfocal, the user should make focusing adjustments using the \_\_\_\_\_ adjustment knob when viewing a specimen under high power.

- A) coarse  
B) condenser  
C) stage  
D) fine

Answer: D

Learning Outcome: 2.2

Bloom's Taxonomy: Applying/Analyzing

- 7) To avoid damaging a lens or breaking a slide, the user should always begin viewing a specimen with the \_\_\_\_\_ power objective lens.

- A) medium  
B) lowest  
C) oil immersion  
D) highest

Answer: B

Learning Outcome: 2.2

Bloom's Taxonomy: Applying/Analyzing

