

10th edition

## LABORATORY EXERCISE 3 CARE AND USE OF THE MICROSCOPE

Ignore micrometer Questions! (Grayed out below)

### Laboratory Report Answers

#### PART A

1. 100×
2. 1,000×

#### PART B

1. (sketch)
2. About 4.5 mm for scanning power (using 4× objective)
3. About 4,500 micrometers
4. About 2.2 mm
5. About 2,200 micrometers

#### PART C

1. (sketch)
2. About 1.7 mm (using a 10× objective)
3. The diameter of the scanning-power field of view is about 2.6 times greater than that of the low-power field of view.
4. Student is unable to see two adjacent mm lines on the scale in a high-power field of view.
5. Light intensity is decreased when high-power objective is used.
6. (sketch)
7. Upside down and reversed from right to left
8. Left
9. Toward the observer

#### PART D

1. f
2. i
3. c
4. a
5. h
6. j
7. d
8. b
9. g
10. e

#### PART E

(sketches)