

**CS 8.2 Question Set #1:**

1. How should you prepare your work area before bringing materials to it?
2. How should you carry the microscope to your work area?
3. What parts of the microscope should you keep clean? Why?
4. Would you be able to see any of the following items without using a microscope? Which ones?
  - a. a liver cell (about 0.02 mm)
  - b. the head of a pin (about 1 mm)
  - c. an amoeba (about 0.1 mm)
  - d. a paramecium (about 0.23 mm)
  - e. a red blood cell (about 0.007 mm)
5. Which of these sizes surprise you in Q4? Which ones? Why?
6. What is the function of a compound microscope?
7. Your classmate is viewing a specimen using high power and is about to refocus using the coarse adjustment knob. What would you recommend your classmate do and why?
8. If your microscope has a 10x eyepiece, what is the total magnification when you use a:
  - a. 4x objective lens
  - b. 10x objective lens
  - c. 40x objective lens
9. Imagine you are given a specimen that measures 0.03 mm. If you use a microscope with a 10x eyepiece and a 40x objective lens, how big will the image of the magnified specimen look?