**Name: Period: Date:**

**Focus Questions for Chapter 6.2 due Tuesday, 11/12**

# Questions to answer as you watch the videos and/or read about surface area to volume ratios. You will not be asked to turn these in, but Ms. Ransom may check to make sure you have completed them through a clicker quiz or short written response. You should be ready to discuss the answers during class.

1. What are the smallest known cells? How big are they?
2. How large is a typical prokaryote? Eukaryote?
3. In general, would a larger or smaller cell have a great surface area to volume ratio? Explain.
4. How does the SA:V ratio explain the size *and* shape of cells?
5. Calculate SA:V for each of the following:  
   1. Rectangular plant cell that is 40 µm wide and 75 µm long
   2. Spherical animal cell with a 90 µm diameter
   3. Rod-shaped bacterium (assume it is roughly cylindrical) with a diameter of 1 µm and length of 7 µm

**Questions I have, that I plan to ask about in class:**