**Name: Period: Date:**

**Focus Questions for Chapter 6.2 - 4 (Unity of Cell Structures: Endomembranes) due Monday, 9/16**

# Questions to answer as you watch the videos and/or read phylogeny. 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. As you read about the cell organelles, make a chart with three columns. In the first column, list structures and characteristics found only in prokaryotic cells, in the second list structures and characteristics of both prokaryotic AND eukaryotic cells, and in the third, list structures and characteristics unique to eukaryotes.
2. Compare the structure and location of genetic material in prokaryotes vs. eukaryotes.
3. How does the surface area to volume ratio explain the size of cells and their different shapes?
4. Describe how the structure of the nucleus affects its function.
5. Explain the importance of ribosomes and give an example of the types of cells in which they are common.
6. Explain the path that a protein takes through a eukaryotic cell, from synthesis to secretion.
7. What are the specific functions of the rough and smooth ER?
8. Explain the need for lysosomes in the cell.
9. Give examples of different types of vacuoles and their functions.

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