**Name: Period: Date:**

**Focus Questions for Chapter 6.5 - 6 (Unity of Cell Structures: Energy & Support) due Tuesday, 9/17**

# 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. Continue with your chart from yesterday’s FQ #1 as you read these sections.
2. The heading for section 5 says “Mitochondria and chloroplasts change energy from one form to another.” Explain what this means.
3. Review your endosymbiotic theory evidence table from class, as it is discussed briefly in this section.
4. Discuss how the internal structure of a mitochondrion (be sure to use the correct terminology) relates to its function.
5. Discuss how the internal structure of a chloroplast (be sure to use the correct terminology) relates to its function.
6. What is a **peroxisome** and why is it included in the energy section of the organelle chapter?
7. What is the role of the **cytoskeleton**?
8. What is a **motor protein** and how does it work? Give a specific example.
9. Summarize the three main components of the cytoskeleton in regards to their structures and functions.
10. What is the purpose of **centrosomes**/**centrioles**?
11. Compare and contrast the roles of **cilia** and **flagella** in the movement of cells. Give specific examples of each.
12. For the BLAST lab, many students chose either actin or myosin as the protein for which to find the gene sequence and compare across different organisms. Give three examples of actin and myosin at work within different cell types in order to enable movement.
13. Give examples of how intermediate filaments help to give cells their shapes.

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