**Name: Period: Date:**

**Focus Questions for Chapter 26.6 (Classifying the Diversity of Life) due Wednesday, 9/18**

# 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. How has the classification of organisms by scientists changed over time? Why did these changes occur?
2. Describe the characteristics of the three **domains** of living things that are recognized today.
3. Figure 26.21 shows a phylogenetic tree of the three domains. Discuss the implication of the placement of the common ancestor of all life. *Hint: the “Draw it” portion of the figure’s caption may help you answer this question.*
4. What are rRNA genes and why are they so helpful in determining evolutionary relationships?
5. What is **horizontal gene transfer** and how might it occur?
6. Explain the “ring of life” figure (26.23) and why it might be a more accurate representation of the relationships between the three domains than the traditional horizontal phylogenetic tree.

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