**BIOL 301 – Reverse Lecture Quiz #11** **NAME:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Fill out the chart:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Poaceae** – for comparison | **Cyperaceae** | **Juncaceae** |
| **Why do we care?** |  |  |  |
| **Habit** |  |  |  |
| **Leaf arrangement**  |  |  |  |
| **Leaf composition and other vegetative characters** |  |  |  |
| **Significant reproductive structures** |  |  |  |
| **Ovary Position** |  |  |  |

1. What are the key differences in stem morphology between the Poaceae, Cyperaceae and Juncaceae?
2. What are the key differences in basal sheath morphology between these same 3 families?
3. Only one of these families has intercalary meristem – which one and what is the adaptive value?
4. What is the dominant habitat for both the Cyperaceae and the Juncaceae?
5. In the Cyperaceae, the inflorescence is generally subtended by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Some species in the Cyperaceae have 2 carpels, some have 3 – how does that influence the shape of the achene?
7. Which is the only one of these families to have “ordinary” flowers, with visible tepals?
8. Which is the only one of these families to have a capsule fruit instead of an achene or caryopsis?
9. Most people in the world get most of their food calories from one of these three families – which one?
10. How did you learn about these families? What resources did you use? Are you using new resources as we continue with the reverse lecture process? Do you feel comfortable about your level of understanding? Did this quiz adequately capture your knowledge of these families? Is there anything else that you learned that is interesting and/or significant?
11. Evaluate the value of the reverse lecture process over the straight up lectures driven solely by my PowerPoints. Would you prefer more of these or did we do about the right number? Was it helpful to have some of the more complicated families explained in a lecture format?