**Kingdoms Extension Questions**

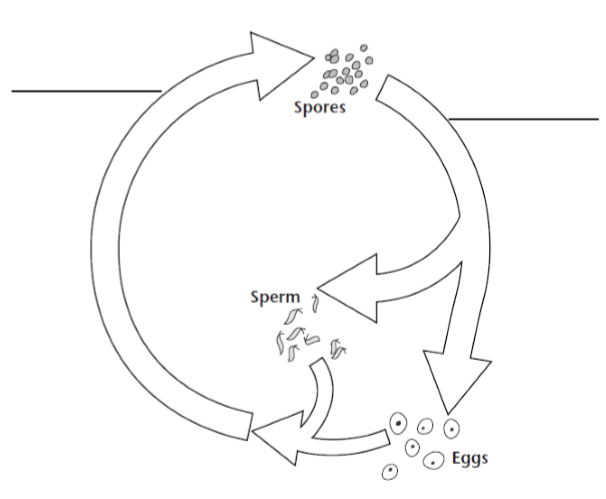
**Name:**

1. What used to be the name of the kingdom that contained both of the prokaryotic kingdoms within it? (research on own)
2. Explain why Kingdom Protist being sorted based on mode of nutrition is different than the sorting done for the other kingdoms? (pg. 498)
3. Research a cladogram that would show the evolutionary path of Protists. What exemptions do many organisms along the way have? (other resource than textbook)
4. Using the diagram on page 528, sketch the structure of a typical fungi making sure to label the hyphae, fruiting body and mycelium and indicate what the function of each is.
5. Kingdom Fungi is broken into classifications based on the means of reproduction. State how each of the 4 classifications reproduce. (pg. 530, 532, 534 & 536)
6. Explain what is meant by “fungi are essential to maintaining equilibrium in an ecosystem but can also be the reason for its disruption”. (pg. 538)
7. Define each of the following terms:
8. gametophyte

1. sporophyte
2. spore
3. gametes

e) zygote

1. Use the textbook on page 552 which discusses the life cycle of plants (alteration of generation) and answer the following questions:
2. Using the diagram below and page 552 in the textbook label where the following vocabulary words would go: pollen, zygote, gametophyte, sporophyte
3. Give a brief description of what occurs during alteration of generation



1. Identify what parts of the cycle are considered haploid (N) and what parts are considered diploid (2N).
2. Explain why this cycle is called “Alteration of Generation”.
3. Explain what a seed is making sure to include the following in your explanation: embryo, seed coat and stored food supply. Create a diagram showing each as well.
4. Explain why Coniferophyta are considered “naked seeds” and Anthophyta are considered “protected seeds”.
5. Within angiosperms there are two classes (monocots and dicots) explain the difference(s) between them.