Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_

**Accelerated Biology**

**The Kingdoms of Stevenson High School – A Mini Field Trip ☺**

Today we will be taking a walk around the pond and making some observations. Answer the questions with your partner below after we get to each stop. At home, fill in any blanks you have and answer the analysis questions.

1. **Stop 1 – By the pond near the point**
   1. What kingdoms can you see represented in front of you? Name each kingdom and one organism in that kingdom.
2. **Stop 2 – Closer to the pond**
   1. What evidence of members of the Animal kingdom do you see here?
   2. Do you see *more* members of the animal kingdom or the plant kingdom here?
3. **Stop 3 – On the side of the pond near the school**
   1. What is the organism pointed out here?
   2. What kingdom does it belong to?
   3. How does it get its food?
   4. How do you know that it does not perform photosynthesis by looking at it?
4. **Stop 4 – Near the pond by parking lot A**
   1. What kingdom will we see a lot of if we take a water sample from here?
   2. Why can’t we see the organisms by looking at the water?
   3. We will look at these organisms under the microscope in the classroom later. What characteristic of the organism could give you a clue as to whether it performs photosynthesis?
   4. Are any members of the Protista kingdom visible here? If so, what kind?
5. **Stop 5 – Southeast corner of parking lot A**
   1. There are three different types of members of the Plant kingdom here. Name them.
   2. What do they have in common?
   3. How are these Plant kingdom members different?
6. **Stop 6 – On the way back to the Point**
   1. Why are the leaves on this tree yellow?
   2. How will the tree have energy to grow leaves in the spring if it has no leaves to do photosynthesis at that time?
7. **Stop 7 – On the way back to the Point**
   1. What are the flowers used for by the plant?
   2. What are fruits for?
   3. Describe a fruit that is not edible that you see out here.
8. **Stop 8 – Back at the point or at home**
   1. We have not discussed 2 of the kingdoms yet. What characteristics do those 2 kingdoms have in common?
   2. Why haven’t we seen them? Where could we find them?

**Analysis** – Use Chapter 19 in your textbook, the answers to the above questions, and your brain to answer the following questions using complete sentences!

1. What would happen to the pond organisms if all of the plants were killed with pesticide? Why?
2. Why are sponges living in the ocean considered animals? (do not think that sponges are like Spongebob—they don’t really have eyes or legs ☺)
3. How are green algae and plants different?
4. Go to my wiki and view the video clip on Protists.

* 1. When you look at pond water under the microscope, most of the organisms are protists. How do you know this?
  2. How would you know if a protist is photosynthetic?
  3. Are all protists microscopic? Explain.

**Turn the page over and complete the chart on the back ☺**

1. Fill in the following chart:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Kingdom** | **Domain** | **Cell Type** | **Cell Wall**  (yes or no) | **Body Type**  Unicellular or Multicellular | **Nutrition**  (heterotroph,  autotroph, or both?) | **Example** |
| Archae-bacteria |  |  |  |  |  |  |
| Eubacteria |  |  |  |  |  |  |
| Protista |  |  |  |  |  |  |
| Fungi |  |  |  |  |  |  |
| Plantae |  |  |  |  |  |  |
| Animalia |  |  |  |  |  |  |