### Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_ Mods: \_\_\_\_\_

### 2.1 Common Parts of the Cell Practice

1. Why are there so many different types of cells in a multicellular organism?
2. Complete the sentence:

**\_\_\_\_\_\_\_\_** (**all, some, no**) cells have a plasma membrane, cytoplasm, ribosomes and DNA.

1. Why do you think pollen grains have a “spikey shape” as they appear in the image found in your class resources? What function might these spikes do?
2. How is a nerve cell shaped so that it can do its job of quickly passing messages to many other cells at once?
3. Infer, if algae did not live in water, would they likely have the “tails”? Why, why not?
   1. *Research challenge:* Name the “tail-like cell structures that function in movement/locomotion in watery environments.”
4. List 5 parts common to *all* cells.
5. Why do you think it makes sense that all cells must have a plasma (cell) membrane?
6. Why do you think it makes sense that all cells must have DNA?
7. Name three organisms whose cell(s) contain ribosomes.
8. Do all living things make proteins? Provide some support for your answer. (HINT: look in chapter 2.1 for info regarding features that all cells have in common!)