**“Lower” 4 Kingdoms Booklet**

**Lab/ Project Grade Due Date: \_\_\_\_\_12-13-16\_\_\_\_\_\_\_\_\_\_\_\_**

**Page 1—Creative Title Page ( 3 pts)**

**Page 2-- Archeabacteria ( 4 pts)**

**Draw, color, label and title one or two of the environments they live in (pg. 485) Write a summary about them and their origin.**

**Page 3—Eubacteria ( 8 pts)**

**Draw E. coli and Streptococcus (pg. 489)**). **Are they prokaryotic or eukaryotic? What does that mean?**

**Describe how Eubacteria can cause diseases like food poisoning and strep throat, how they can be used as a tool to cure diseases, their importance in the Nitrogen cycle and as a decomposer and also used as a food source.**

**Explain the difference between active and passive immunity. (pg. 1038- 1040)**

**Explain the difference between how antibiotics and vaccines work to cure diseases.**

**Page 4-- Pictures of Protists… ( 10 pts)**

**Draw, color label and title the following protists… Remember…Structure and functions are related!!**

1. **Ameoba—Psuedopods (pg. 505)**
2. **Paramecium-- cilia, oral groove, anal pore, and contractile vacuole (pg. 517)**
3. **Euglena—flagellum and cholorplasts ( pg. 511)**

***\*\*\* Honors only…. For each of the above… describe the function of the specialized organelles and if the Protist is heterotrophic or autotrophic or both.***

**Page 5-- Protist in the Ecosystem Summary ( 4pts)**

**Use the following video clip…** https://www.youtube.com/watch?v=PrVShZZDKk8

**Write a paragraph about Protists. Include where they live, how they can cause diseases, practical uses of them (pg. 524) and how you can avoid them.**

**Page 6—Fungi ( 8pts)**

**Draw, color, label and title a picture of a mushroom (pg. 539) Be sure to label the spores that are used for asexual reproduction ( the primitive seeds) and the hyphae ( the primitive roots) Describe how fungi can cause diseases, how they can be used as food but also spoil food and to cure diseases.**

**Page 7-- Pond Water /Microscope Activity ( 5 pts) (Use a plastic petri dish to draw the circles for viewing)**

**Draw one of the prepared slides from the Pond Set…OR…. Draw what you see in the Pond Water. Be sure to record the magnification and a title.**

**Page 8--Lower 4 Kingdoms Epilogue ( 8 pts) Summarize what you learned in a nice fat paragraph!**