

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

# ***BIOLOGY – FINAL EXAM STUDY GUIDE***

## FORMAT:

60 multiple choice and matching questions (60 points)  
8 short answer questions (80 points)

## SHORT ANSWER (ANSWER QUESTIONS 1-2 AND ANY OTHER 6 QUESTIONS):

1. List the 13 levels of organization in order. Provide examples and definitions of each level.
2. Be familiar with at least six examples of SURFACE AREA, STRUCTURE-FUNCTION RELATIONSHIP and/or LOCK AND KEY FIT.
3. Know how to manipulate DNA, mRNA, tRNA, and amino acids. Know how mutations affect a strand of DNA or RNA. Understand how to read the codon chart.
4. Be able to solve basic (monohybrid) genetics problems, including those that involve incomplete dominance.
5. Know a lot of the ecological terms, such as: exponential/logistic growth, parasitism/mutualism/commensalism, R-selected/K-selected, abiotic/biotic factors, and fundamental/realized niche.
6. Be familiar with the various natural selection stories we have studied. For example, know about the peppered moth, giraffe height, drug-resistant bacteria, and Darwin's finches.
7. Be familiar with various aspects of ecology. I will ask you some thought questions regarding changes to the environment based on things we have discussed.
8. Compare and contrast the theories of Darwin and LaMarck.
9. Be able to read and interpret a food web.
10. Answer thought questions about photosynthesis and cellular respiration. Know the chemical equations for each process.



**!!!!!!! ALWAYS REMEMBER THAT BIO IS LIFE !!!!!!!!**

