**Evolution Test Outline**

*Reading:* Ch.7 pp.137-143

Ch. 13 pp. 268-271, 280-285

Ch. 14 pp. 290-317

*Concepts to study:*

**DNA**

\_\_\_\_\_ 1. Describe & draw DNA.

\_\_\_\_\_ 2. Know the function and structure of DNA.

\_\_\_\_\_ 3. Know 2 types of bases & what complementary base pairing is.

\_\_\_\_\_ 4. Be able to draw a nucleotide & label its parts.

\_\_\_\_\_ 5. Know the difference between germline & somatic mutations and examples of each.

\_\_\_\_\_ 6. Know the differences between gene & chromosomal mutations and give examples of each.

\_\_\_\_\_ 7. Distinguish between the different subtypes of gene & of chromosomal mutations.

\_\_\_\_\_8. Know the vocabulary!

**Evolution**

\_\_\_\_\_ 1. Describe Lamarckian & Darwinian theories of evolution & distinguish between the two.

\_\_\_\_\_ 2. Which scientists influenced Darwin? How did they influence him?

\_\_\_\_\_ 3. Describe artificial and natural selection & distinguish between the two.

\_\_\_\_\_4. Understand the peppered moth as an example of natural selection.

\_\_\_\_\_ 5. List & describe the 5 agents of evolutionary change.

\_\_\_\_\_ 6. Describe the 3 types of selection.

\_\_\_\_\_ 7. Know examples & graphic representation of the 3 types of selection.

\_\_\_\_\_ 8. Explain the difference between coevolution, convergent & divergent evolution. Give examples.

\_\_\_\_\_ 9. Explain the difference between analogous & homologous structures. Give examples.

\_\_\_\_\_ 10. What is adaptive radiation? Give examples.

\_\_\_\_\_ 11. Explain the process of speciation.

\_\_\_\_\_ 12. List the evidence of evolution.

\_\_\_\_\_ 13. What are vestigial structures & give examples.

\_\_\_\_\_ 14. Explain the biochemical evidence for evolution.

\_\_\_\_\_ 15. Distinguish between gradualism & punctuated equilibrium using words, graphs, & examples.

\_\_\_\_\_ 16. Compare and contrast the types of human interference in evolution (GMOs versus artificial selection)

*You should also:*

* read the assigned reading
* go through your notes
* know your vocabulary (on the course outline & new words in your notes)
* ask questions

