## AP Biology Study Guide: Information 9- Mendelian Genetics Extensions

### **Topic Presentation:**

click here

### **Textbook Reading:**

Chapter 8 (same as last study guide pages 144-160)

# Strive for a 5 questions:

no new strive this time

# Supplementary Resources:

"Crash Course: Biology" Videos:

Heredity: Biology #9

**Videos By Paul Anderson:** 

"Advanced Genetics"

"Chromosomal Genetics"

"Blood Types"

"X Inactivation"

### **PDQ for Mendelian Genetics:**

- 1. Explain each of the following phenomena and how they extend our understanding of genetics from the work done by Gregor Mendel and classical Mendelian inheritance patterns. Provide a realworld example of each:
  - a. Incomplete Dominance
  - b. Co-Dominance
  - c. Pleiotropy
  - d. Epistasis
  - e. Polygenic Inheritance
  - f. Sex Linkage
  - g. Gene linkage
- 2. How was sex-linkage discovered?
- 3. Linked genes are usually inherited together, but not always. What circumstances can "unlink" genes?
- 4. How can linked genes be used to map the locations of genes on chromosomes?

# Things you should make sure you understand:

### (feel free to ask questions about them in class)

- Why fruit flies are a good model organism for genetic studies.
- The "nature vs. nurture" argument, and why it is a stupid argument to have