**Pre-AP Genetics Review:**

68 Multiple Choice from chapters 11, 12 and 13

**Ch. 11**

Know basic genetics vocab: gametes, alleles, Gregor Mendel, probability, homo vs. heterozygous

Know how to interpret Punnett Squares, Understnad the Principles of independent assortment and segregation

How many different allele combinations are found in GgNn? \_\_\_\_\_\_\_\_\_\_

Analyze and set up 2 trait Punnett Squares

Incomplete dominance

Codominance

Is human skin color a result of polygenic traits or multiple alleles? \_\_\_\_\_\_\_\_\_\_\_

Crossing over, diploid # vs. haploid # (study chart)

**Ch. 12**

Go over Avery's experiment, Hershey Chase experiment

Griffiths experiment

bacteriophages

What is a nucleotide - draw and label

Chargaff's base pairing rules

Rosalind Franklin, Watson and Cricks contributions

Base pair the other side of this DNA strand - CCTAGAT

Know DNA polymerase and RNA polymerase enzymes

**Ch. 13**

Differences between DNA and RNA

3 types of RNA and what they do

Understand how to transcribe and translate and read the codon chart

Viruses are the exception to the DNA - to RNA - to protein rule

Know your types of mutations and recognize drawings of them (notes and rock pocket mouse)

Basic idea of operons (lac)

Gene regulation is more complex in eukaryotes

Hox genes

Short Answer: Mostly diagram interpretation so look at the pictures and diagrams in your chapters! Know all the steps of mRNA processing before it leaves the nucleus (from your notes or book).