**REVIEW GUIDE FOR CH 12-17 TEST – AP BIOLOGY**

Centromere

Phases of mitosis/Phases of meiosis

Spindle/Kinetochore

Cytokinesis

Crossing over

Using cross over frequencies to find distances between genes

Differences between plant and animal mitosis

Haploid/Diploid

Karyotype

Sources of variation in meiosis

**About 21 questions on mitosis/meiosis (ch** **12/13)**

Monohybrid crosses and ratios

Dihybrid crosses and rations

Incomplete dominance and ratios

Epistasis and ratios

Pleiotropy and ratios

Alleles

Cystic fibrosis

Huntingtons

Albinism

Human blood groups (ABO blood groups only)

Tay-sachs

Achondroplasia (dwarfism)

Phenylketonuria

**About 30 questions on genetics (ch 14)**

Structure of dna

Critical experiments that helped identify DNA as the genetic material and its structure

Chargaff’s rule

Griffith experiment

Avery experiment

Messelson Stahl experiment

Hershey chase experiment

DNA replication – how does it happen and how do we know it is semi-conservative

Helicase

Ligase

DNA polymerase

Primase

Lagging vs. leading strands

Okazaki fragments

**About 24 questions on ch 16**

Sex linked inheritance

Linkage/Recombination

Eukaryotic vs. prokaryotic chromosomes

Translocation

Turner syndrome/Kleinfelter syndrome

Down syndrome

Genomic imprinting

**About 17 questions on ch 15**

RNA polymerase

Functions of mRNA, tRNA, rRNA

Steps in transcription and translation

Eukaryotic RNA processing

Promoters/TATA box

Snurps

Splicesomes

Point mutation/Frameshift mutation

**About 20 questions on ch 17**