

# **EXAM EXPECTATIONS**

## **AP Biology**

### **“Unit 9 Genetics”**

**STATE** the role of chemiosmosis in chloroplasts  
**STATE** the primary role oxygen in cell respiration  
**STATE** the function of each organelle listed in the powerpoint  
**STATE** the role of the SRY gene  
**STATE** the type of DNA that all males inherit from their mother  
**STATE** the type of mutation(s) that results in a chromosome lacking certain genes  
**STATE** why linked genes are inherited together  
**STATE** the Law of Independent Assortment  
**STATE** the Law of Segregation  
**STATE** the effects or result of crossing over  
**STATE** the effects or result of independent assortment  
**STATE** the products of meiosis  
**STATE** the process that leads directly to the formation of gametes  
**STATE** the result (product) of fertilization  
**STATE** the proteins involved in the regulation of the cell cycle whose concentrations fluctuate  
**STATE** the role of kinases  
**STATE** the role(s) of cyclins and MPF's  
**STATE** how a cell will respond after receiving a go-ahead signal at a G1 checkpoint  
**STATE** the type of cell that forms cell plates during cytokinesis  
**STATE** the effect on a cell should cytokinesis not follow mitosis  
**STATE** where spindle fibers originate in both plant and animal cells  
**DEFINE** chromatid, chromosome, chromatin  
**DEFINE** centriole centrosome  
**DEFINE** centromere, kinetochore  
**DEFINE** density dependent inhibition  
**DEFINE** genome, genes, alleles  
**DEFINE** progeny  
**DEFINE** karyotype  
**DEFINE** spores, sporophyte  
**DEFINE** gametes, gametophyte  
**DEFINE** zygotes  
**DEFINE** alternation of generations  
**DEFINE** a test cross  
**DEFINE** multifactorial diseases  
**DEFINE** active site  
**DEFINE** diploid, haploid  
**LIST** differences between sexual and asexual reproduction  
**LIST** differences in homologous chromosomes  
**LIST** the steps of meiosis in chronological order  
**LIST** ways in which sex generates variation