

# **EXAM EXPECTATIONS**

## **AP Biology**

### **“Unit 9 Genetics”**

**OUTLINE cell cycle regulation**  
**OUTLINE the life cycle of plants**  
**OUTLINE the possible role that environmental factors may play on phenotypes**  
**OUTLINE polygenic inheritance**  
**DESCRIBE mitosis**  
**DESCRIBE meiosis**  
**DESCRIBE cytokinesis**  
**DESCRIBE homologous chromosomes**  
**CALCULATE the number of unique gametes that could be formed given a genotype**  
**CALCULATE the phenotypic probability from a given genetic cross (3 or more factor cross)**  
**CALCULATE the number of different gametes possible from a given number of different genes (alleles)**  
**CALCULATE genotypic and phenotypic probabilities of offspring given a pedigree chart**  
**IDENTIFY an example of polygenic inheritance**  
**IDENTIFY stages in cell division by a graphical account of the amount of DNA in a cell**  
**COMPARE sexual and asexual reproduction**  
**COMPARE the different chromosomal mutations**  
**COMPARE the 3 sexual life cycles in living organisms**  
**COMPARE complete, incomplete and co-dominance**