Outline 4: Mendelian Genetics

I. Mendelian Genetics
   A. What is a gene?
   B. What is an allele?
   C. On terms of genes, what do haploid and diploid refer to?
   D. What do heterozygous and homozygous refer to?
   E. What do dominant and recessive refer to?
F. What do phenotype and genotype refer to?

G. How do you use Punnett squares to predict the results of genetic crosses?

1. Monohybrid Crosses

2. Dihybrid Crosses
II. Extensions to Mendelian Genetics

A. Co-dominance

1. What does it mean for a gene to show co-dominance?

2. How do you use Punnett Squares to predict the results of crosses with co-dominant traits?

B. Incomplete Dominance

1. What does it mean for a gene to show incomplete dominance?

2. How do you use Punnett Squares to predict the results of crosses with traits showing incomplete dominance?
C. Sex-linked genes

1. How is gender determined by chromosomes?

2. What is a sex-linked gene?

3. How do you use Punnett Squares to predict the results of sex-linked crosses?