DEFINE alleles, genotype, phenotype,
DEFINE heterozygous, homozygous, pure bred, hybrid, true-breeding
DEFINE dominant, recessive
DEFINE progeny
DEFINE homologous chromosomes
DEFINE linkage maps
STATE Mendel's most significant conclusion from his pea plant experiments
STATE the genotypic and phenotypic ratios for monohybrid and dihybrid crosses
STATE why more males exhibit sex-linked traits
STATE examples of Certain human genetic disorders can be attributed to the inheritance of
        single gene traits or specific chromosomal changes, such as nondisjunction.
OUTLINE P, F1 and F2 generations
OUTLINE non-disjunction
OUTLINE how punnet squares are used as a tool
OUTLINE the inheritance of: Huntington's disease, cystic fibrosis, sickle cell, Tay-Sach's
        disease, color blindness, Klinefelters, trisomy 21 and phenylketonuria
OUTLINE how new combinations of "linked genes" are possible
OUTLINE three ways that sex contributes to phenotypic variation
OUTLINE mitochondrial inheritance
OUTLINE crossing over
CALCULATE the number of unique gametes when given a parental genotype
CALCULATE the probability of a certain genotype in an offspring given parental genotypes
COMPARE monohybrid and dihybrid crosses
COMPARE monohybrid cross offspring between complete, incomplete and co-dominance
COMPARE chromosomes and genes
COMPARE the relationship between crossing over frequency and gene distance from each
        other on the same chromosome
DISCUSS how Mendel accounted for traits that disappeared in the F1 generation only to
        re-appear in the F2 generation
EXPLAIN sex-linked inheritance
EXPLAIN Barr bodies
EXPLAIN the Law of segregation
EXPLAIN the Law of Independent Assortment
EXPLAIN polygenic inheritance
EXPLAIN how the environment play a role in determining one's phenotype
EXPLAIN how a disease is said to be multifactorial
DEDUCE gene positions on a chromosome from recombinant frequencies
PREDICT the relative relationship between genes when given recombinant frequencies
PREDICT ploidy conditions in gametes when non-disjunction occurs in a given stage of
        meiosis
DETERMINE possible gametes from a parental genotype
DETERMINE the an offspring's parents given blood types of parents and the offspring
ANALYZE recombinant frequencies to determine which genes are closet or farthest from
        each other on a chromosome