Quiz #4 Review

Lab 10 – Mitosis & Meiosis

Key terms:

mitosis (know stages)
meiosis (know stages)
cytokinesis
chromosome
sister chromatids
centromere
homologous chromosomes
spindle fibers
centriole
interphase
prophase
metaphase
anaphase
telophase
cleavage furrow
cell plate
spermatogenesis
oogenesis
polar bodies
crossing over
haploid
diploid
chromosome number
prophase I & II
metaphase I & II
anaphase I & II
telophase I & II

Be able to:

-Name the stages of the cell cycle and identify what is happening in each.
-Name the stage and state of what is happening is given a diagram or slide depicting mitosis or meiosis.
-Explain the differences between oogenesis and spermatogenesis in mammals.
-Given a parent cell with any chromosome number, be able to trace the chromosomes step by step through mitosis or meiosis.

Lab 11 – Mendelian Genetics

Key terms:

alleles
genotype
phenotype
trait
gene
homozygous
heterozygous
hybrid
Law of Segregation
monohybrid cross
dihybrid cross
Law of Independent Assortment
phenotypic ratio
autosomes
sex chromosome
sex-linked gene
codominance

Be able to:

-Solve genetics problems involving
  - complete dominance (Punnett squares for both monohybrid and dihybrid crosses)
  - sex-linked traits (e.g. color blindness)
  - codominace (e.g. blood typing)
-Understand the relationship between genotype and phenotype.
-Understand the Law of Segregation and Law of Independent Assortment.