

HUMAN ANATOMY & PHYSIOLOGY II LAB – CAHS 123
Key Points

Lab # 13

EXERCISE #45 – Principles of Heredity

Know the following:

- Genes regulate our traits
- Humans: 46 chromosomes (diploid or 2n)
 - in all cells except eggs/sperm
 - established at fertilization and maintained by mitosis
 - 2 sets of homologous chromosomes carrying similar info
- Alleles: genes for same traits on both homologous chromosomes
 - same: homozygous for that gene/trait
 - different: heterozygous for that gene/trait
- Dominant/recessive: most genes (dominant suppresses recessive)
- Genotype vs. Phenotype
- Monohybrid cross – one pair of alleles

Do the following:

- Activity 1 – dom-rec cross
- Activity 2 – incomplete dominance cross
- Activity 3 – sex-linked inheritance cross
- Activity 4 – Probability
 - 10 tosses of a coin
 - 24 tosses with 2 coins
 - Discussion
- Activity 5 – Characteristics (Phenotype) and Genotype

Homework – Review for Final Lab Practical