

Chapter 2

Genes, Chromosomes and DNA

A. Mendel and Peas

Simple inheritance patterns (Mendel)
phenotype/genotype
dominant/recessive
heterozygous/homozygous
first and second “laws”

B. Chromosomal Basis of Inheritance

chromosomes in nucleus
cell division: mitosis/meiosis
gene linkage and crossing-over
chromosomal abnormalities (nondisjunction)

C. Molecular Basis of Inheritance

DNA carries “information”
DNA structure and replication