

Inheritance Patterns Studied in Biology 211

Eukaryotic Inheritance Patterns

1. Monohybrid cross of a gene that has dominant and recessive alleles
2. Monohybrid test cross
3. Dihybrid cross of two genes that have dominant and recessive alleles
4. Dihybrid test cross
5. Multiple alleles of a gene
6. Pleiotropy
7. Monohybrid cross with lack of dominance (incomplete or co-dominance)
8. Collaboration with a dihybrid cross (two independent genes working together)
9. Epistasis
10. Polygenic inheritance
11. Environmental influence on gene expression
12. Gene linkage on autosomes (linked genes)
13. Sex-linked inheritance
14. Extra-nuclear inheritance (mitochondrial and chloroplast) DNA
15. Pedigree Interpretation

Prokaryote Gene Transmission and Recombination

1. Transduction
2. Transformation
3. Conjugation
4. Plasmid gene transfer