

6th Grade Study Guide

Chapter 5

Heredity

GENETICS Section 1

- Define heredity and genetics.
- Explain what an allele is and differentiate it with a gene.
- Share why Mendel is considered the 'Father of Genetics.'
- Compare and contrast hybrids and purebreds.
- Identify how dominant and recessive alleles interact.
- Properly create a Punnett square and identify how it is a predictor of probable outcomes.
- Compare and contrast genotype and phenotype.
- Compare and contrast homozygous and heterozygous.

GENETICS SINCE MENDEL Section 2

- Describe the outcome of inheritance from incomplete dominance.
- Describe and identify an example of multiple alleles.
- Define polygenic inheritance.
- Describe what a chromosome disorder is.
- Predict from parents genotype the probability of receiving a recessive genetic disorder.
- Share how a baby's sex is determined.
- Predict how a given set of genotypes will result in a sex-linked disorder.
- Define what a pedigree is.

ADVANCES IN GENETICS Section 3

- Define genetic engineering. Give examples.

