6.4 Power Notes

Gene: piece of DNA that tells a cell to make a certain polypeptide;

Allele: an alternate form of a gene; there may be many different forms of the same gene in a population; each individual organism has 'only two forms of that gene, one from the mother and one from the father.

Genome: All of an

organism's genetic material

Genotype: all of an organism's genetic material, unique. Represented by letters such as BB, Bb, or bb.

Symbols: represented with individual letters; uppercase letters = dominant; lower case letters = recessive

Homozygous: describes two alleles at a particular locus that

the same

Heterozygous: describes two alleles at a particular locus that are

different

Dominant: expressed even when the alleles are different

Recessive: expressed only when two copies are present; represented by two lowercase letters

Phenotype:

an organism's physical characteristics or traits; influenced by genotype and environmental factors. Example would be that an organism's eyes are of brown phenotype with an underlying genotype of BB.