**Key terms from Chromosomes & Genes (B9.1)**

**Inheritance**

The transmission of genetic information from generation to generation

**Chromosome**

A thread of DNA, made up of a string of genes

**Gene**

A length of DNA that is the unit of heredity and codes for a specific protein

**Allele**

Any of two or more alternative forms of a gene

**Haploid nucleus**

A nucleus containing a single set of unpaired chromosomes (e.g. sperm and egg)

**Diploid nucleus**

A nucleus containing two sets of chromosomes (e.g. in body cells)

**Key terms from Cell Division (B9.2)**

**Mitosis**

Nuclear division giving rise to genetically identical cells in which the chromosome number is maintained by the exact duplication of chromosomes

**Meiosis**

Reduction division in which the chromosome number is halved from diploid to haploid (details of stages are **not** required)

**Key terms from Monohybrid Inheritance (B9.3)**

**Genotype**

The genetic makeup of an organism in terms of the alleles present (e.g. Tt or GG)

**Phenotype**

The physical or other features of an organism due to both its genotype and its environment (e.g. tall plant or green seed)

**Homozygous**

Having two identical alleles of a particular gene (e.g. TT or gg)

**Heterozygous**

Having two different alleles of a particular gene (e.g. Tt or Gg), not pure-breeding

**Dominant**

An allele that is expressed if it is present (e.g. T or G)

**Recessive**

An allele that is only expressed when there is no dominant allele of the gene present (e.g. t or g).

**Key terms from Variation & Selection (B9.4)**

**Continuous Variation**

**Discontinuous Variation**

**Evolution**

**Differential survival**

**Natural selection**

The greater chance of passing on of genes by the best-adapted organisms

**Mutation**

A change in a gene or chromosome

**Antibiotic resistant bacteria**