

Heredity

Picture Vocabulary

Organisms and Environments

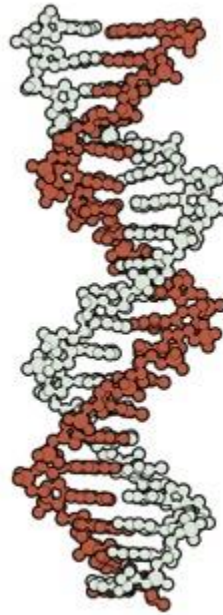
Heredity

OUR FAMILY TREE



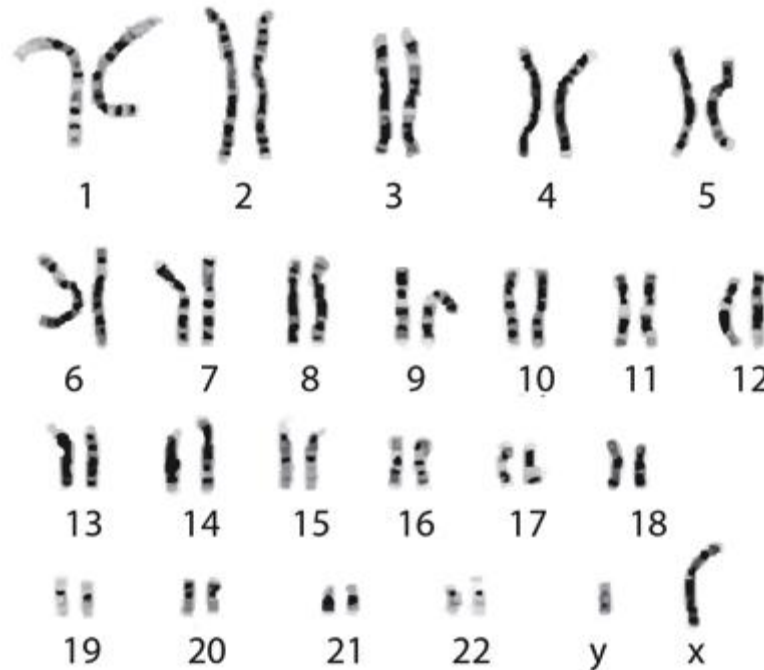
The transfer of genetic information
from parent to offspring.

DNA (deoxyribonucleic acid)



Contains information that forms the hereditary material of all cells.

Chromosome



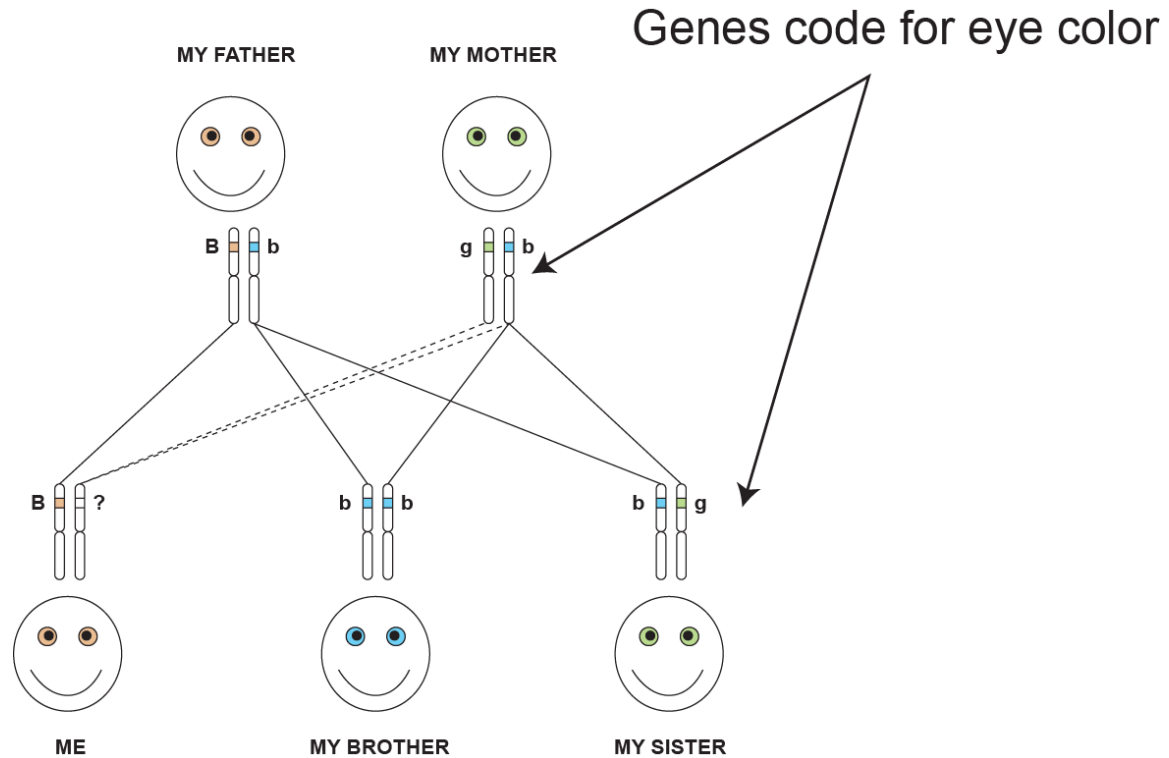
A single, highly organized and structured piece of DNA .

Genes



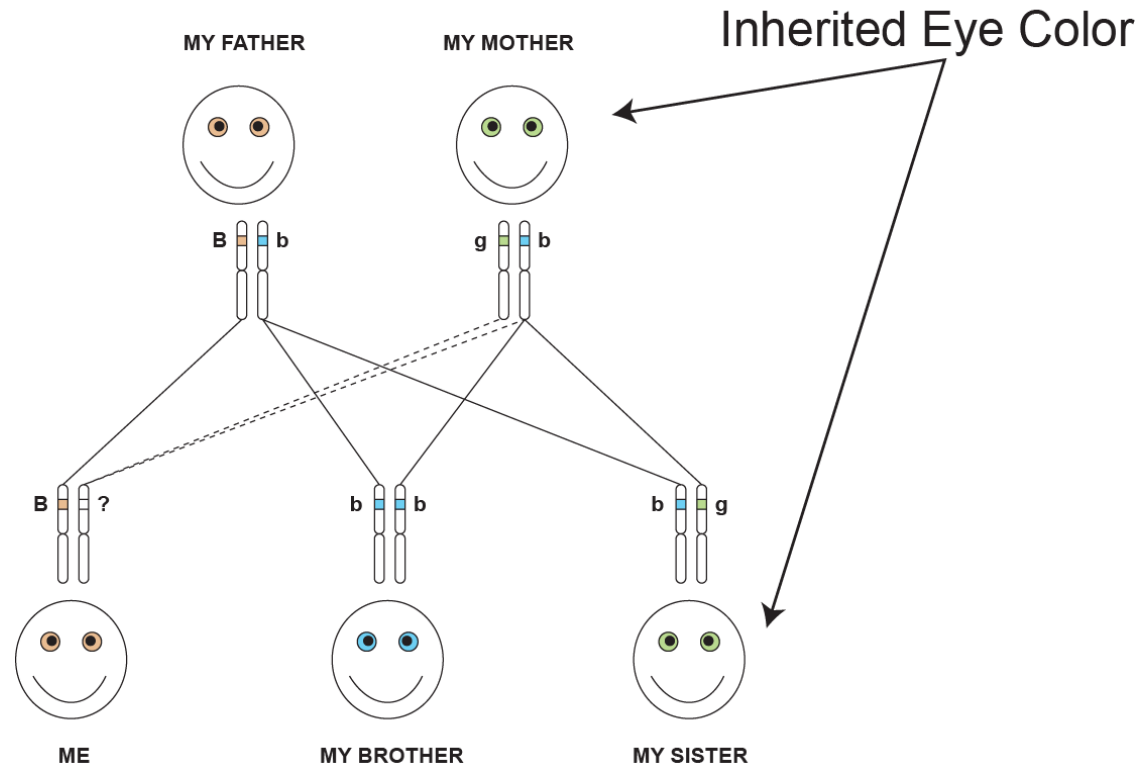
The basic physical and functional unit of heredity made up of DNA.

Genotype



The exact genetic information carried by a single individual.

Phenotype



The physical appearance of an organism.

Trait



A characteristic of an organism;
can be genetic or acquired.

Dominant

PEA PLANT HEIGHT



TT

TALL is dominant



tt

SHORT is Recessive

Parental
Generation



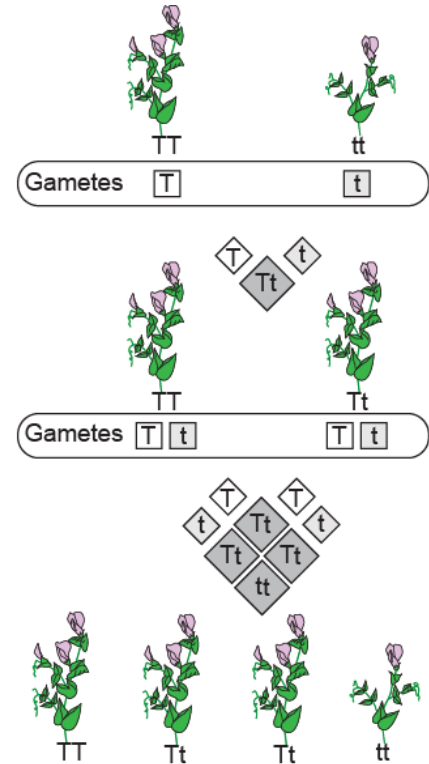
F1 Generation

Genotype: All are Tt
Phenotype: All tall



F2 Generation

Genotype: TT Tt tt = 1:2:1
Phenotype: Tall Dwarf 3:1



An allele that is always expressed.

Recessive

PEA PLANT HEIGHT



TT

TALL is dominant



tt

SHORT is Recessive

Parental Generation



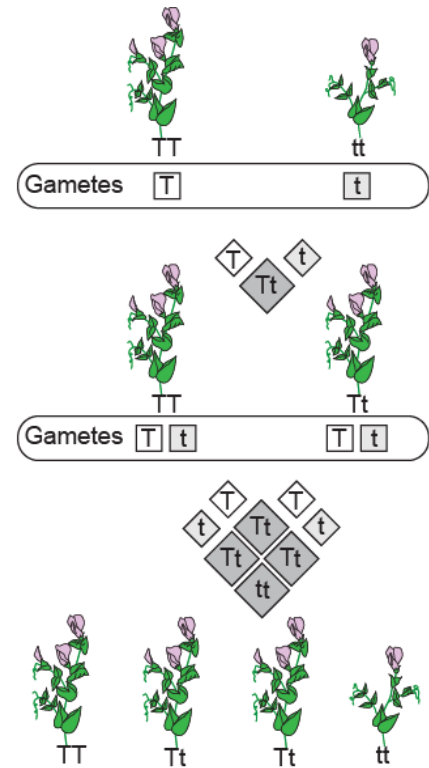
F1 Generation

Genotype: All are Tt
Phenotype: All tall



F2 Generation

Genotype: TT Tt tt = 1:2:1
Phenotype: Tall Dwarf 3:1



An allele that is only expressed if there is no different allele present.