

Mendelian Genetics

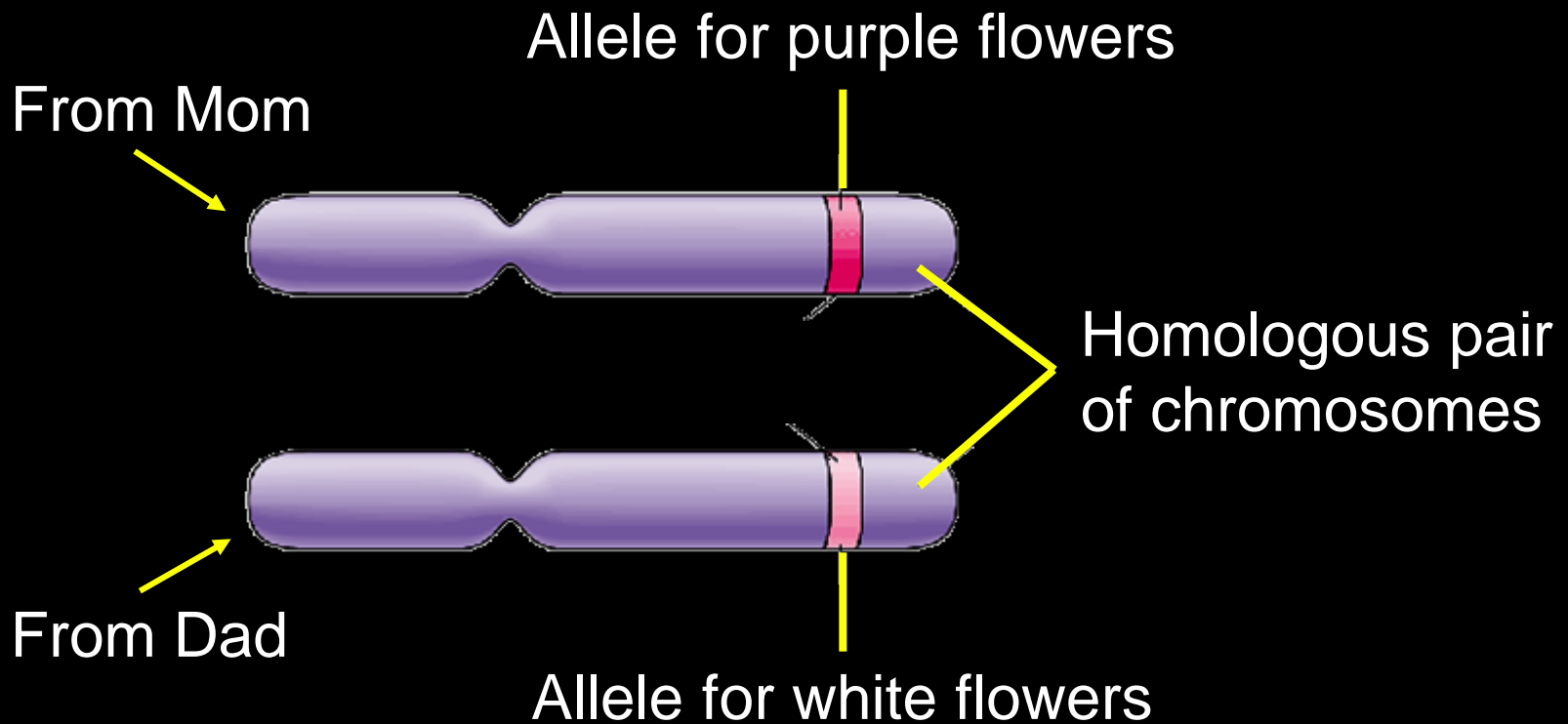
Part 1



Learning Objectives

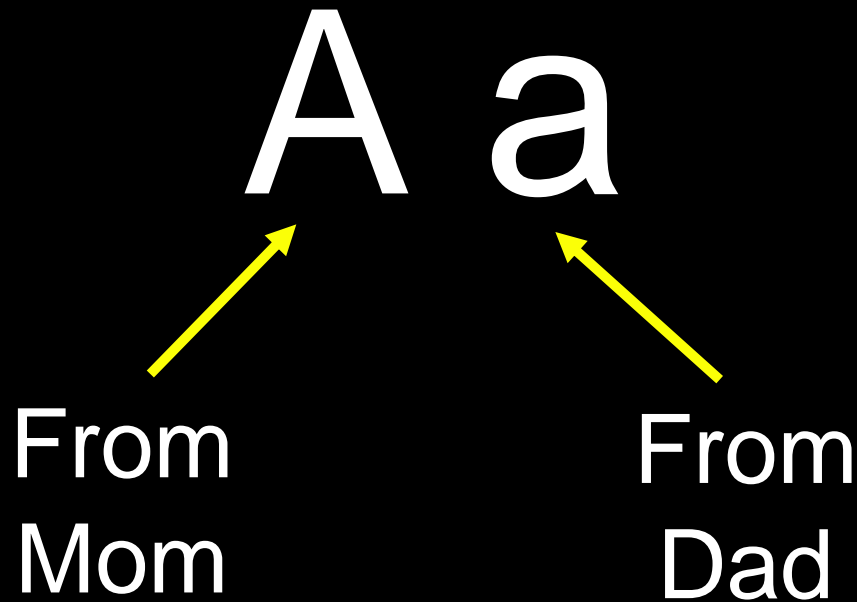
- Describe what an allele is and explain the difference between homozygous and heterozygous alleles

What is an Allele?

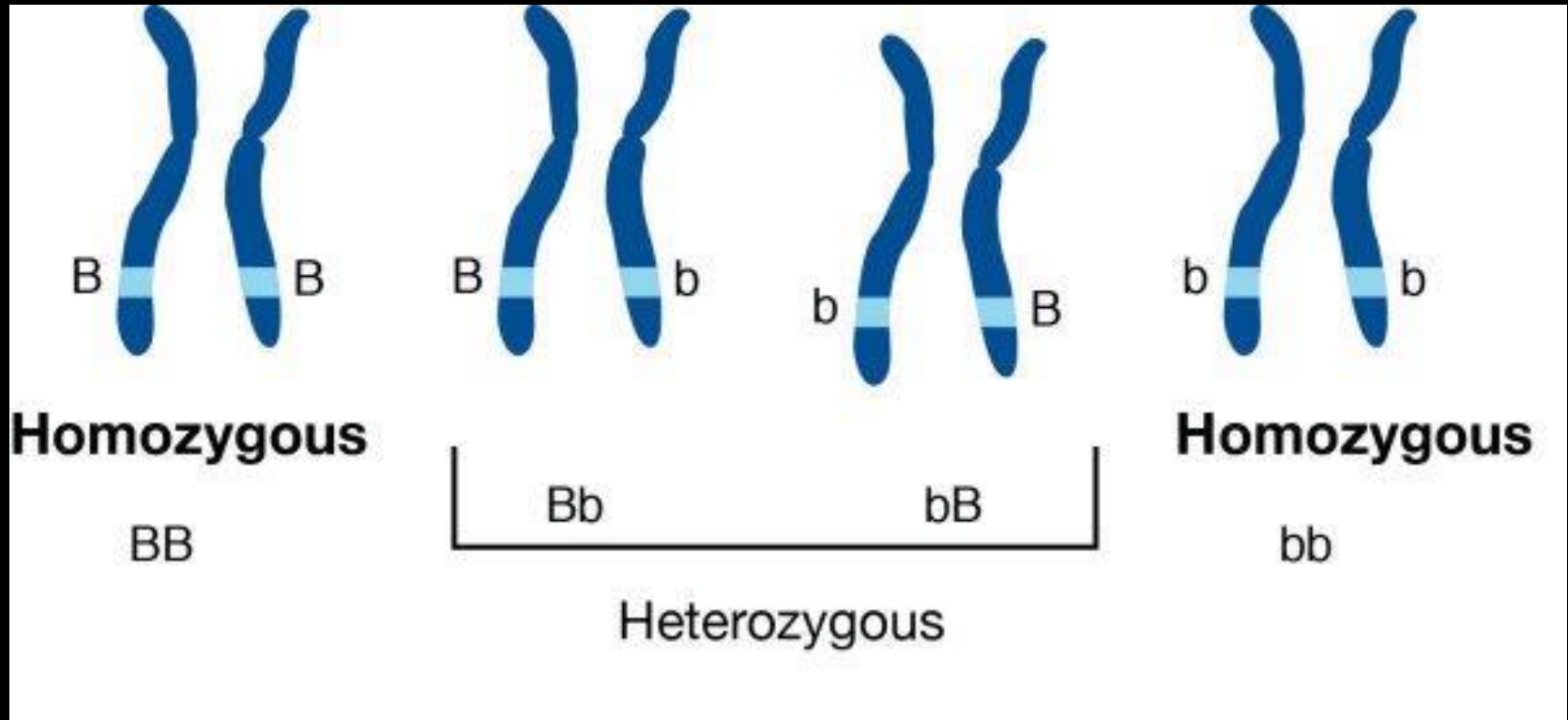


Allele - a version of a gene that is located at a specific position on a specific chromosome

Alleles are Represented by Letters



Homozygous vs. Heterozygous

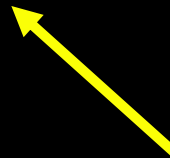


Homozygous - two alleles are identical (BB, bb)

Heterozygous - two alleles are different (Bb)

Capital Letters are Dominant

A a



Dominant
Allele

(Powerful, Influential)

Recessive
Allele

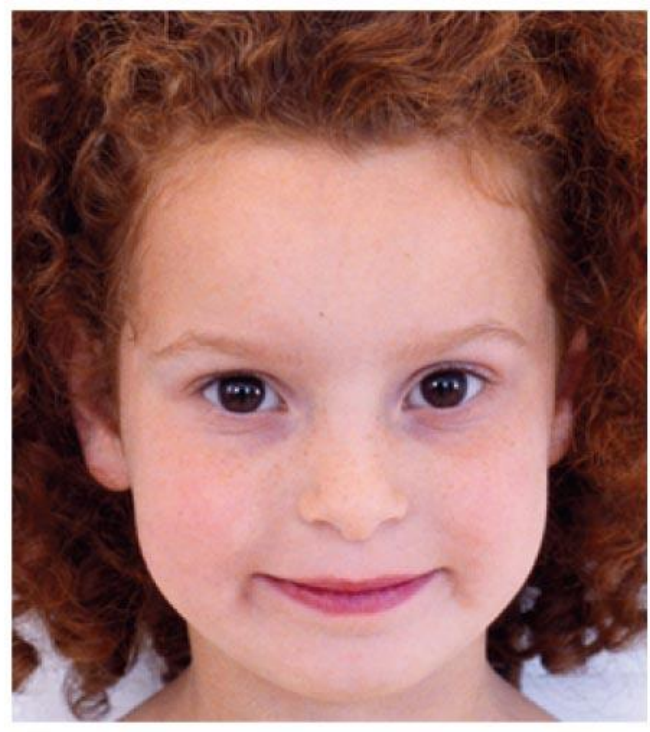
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Dominant Masks Recessive



Dominant allele

= F F or F f

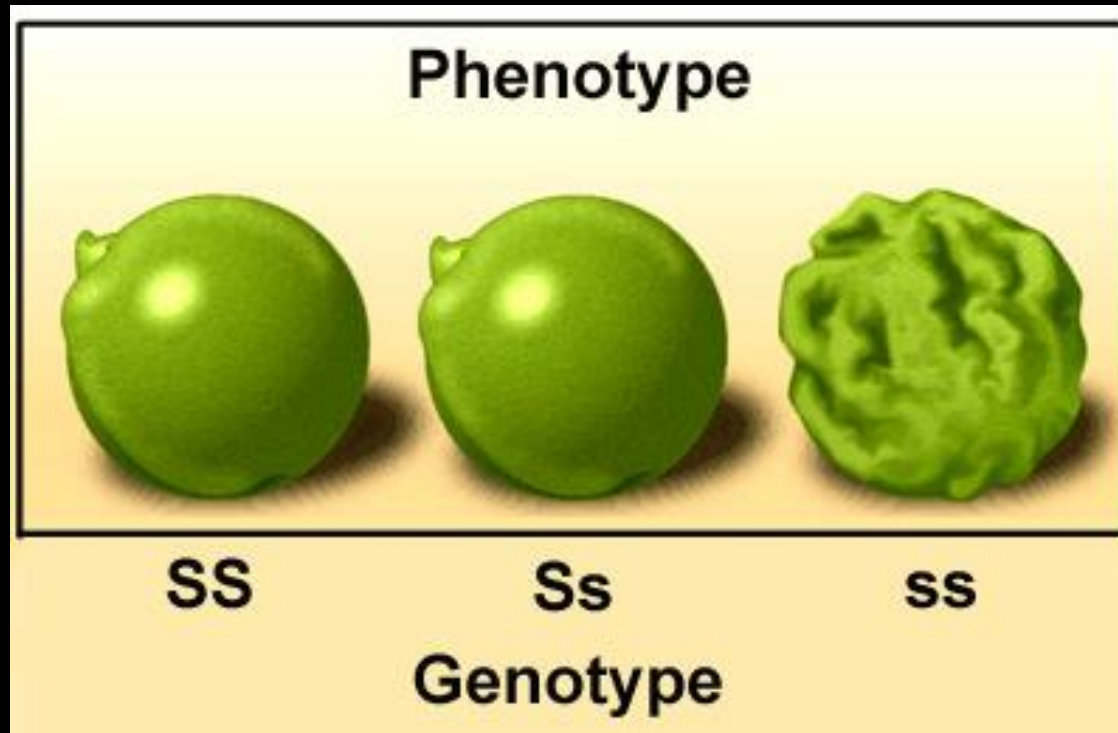


Recessive allele

= f f

An organism will always exhibit the dominant trait when present.

Genotype vs Phenotype



Phenotype - physical appearance of an inherited trait.

Genotype - genetic makeup of an organism.

YouTube

Genotype vs. Phenotype

Stop Here

