

Dominant vs. Recessive

Vocabulary

Dominant -
the allele is always expressed as the phenotype when the allele is present in the genotype; Example:
brown eyes = BB or Bb

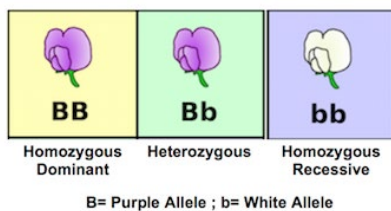
Recessive -
the allele is ONLY expressed as the phenotype if it is the ONLY allele present in the genotype; Example:
blue eyes = bb

Homozygous -
a pair of matching alleles; the same gene is inherited from both parents;
Example: BB or bb

Heterozygous -
a pair of different alleles; each parent gives a different allele of the gene; Example: Bb

Purebred -
two of the same alleles for a gene;
Example: BB or bb

Hybrid -
the alleles are different for a gene;
Example: Bb



Sex-linked trait -
a trait where the gene is located on a sex chromosome (female/X or male/Y); Example:
colorblindness (+ = dominant; c = recessive)

Review

Phenotypes are ...

Genotypes are ...

Alleles are ...

Dominant vs. Recessive

Dominant -

Examples from the Trait Charts:

Recessive -

Examples from the Trait Charts:

Traits Chart

Complete the column headings: **DOMINANT** and **RECESSIVE**

TRAIT	PHENOTYPE		PHENOTYPE	
Hair Line	Widow's Peak	WW or Ww	Straight hair line	ww
Tongue Rolling	Tongue Roller	TT or Tt	Non-Roller	tt
Earlobes	Detached	EE or Ee	Attached	ee
Hand Clapping	Left thumb on top	QQ or Qq	Right thumb on top	qq
Freckles	Freckles	FF or Ff	No Freckles	ff
Handedness	Right	RR or Rr	Left	rr
Cleft Chin	Cleft in Chin	CC or Cc	Smooth Chin	cc
Dimples	Dimples	DD or Dd	No Dimples	dd

Remember Mendel & His Pea Plants?

☞ See image to the left.

What is the **dominant** trait?

What is the **recessive** trait?

What are the **purebred** examples in this image?

What is the **hybrid** example in this image?