

Patterns of Inheritance

1. Simple Dominance = heterozygous phenotype expresses the dominant trait (what we have been practicing)

$RR = \text{red}$

$Rr = \text{red}$

$rr = \text{blue}$

	R	r
R	RR	Rr
r	Rr	rr

Ex: round vs wrinkled peas, wet vs dry earwax

2. Incomplete Dominance = heterozygous phenotype looks like a blend between the dominant and recessive trait (incomplete pass)

$RR = \text{red}$

$Rr = \text{purple}$

$rr = \text{blue}$

	R	r
R	RR	Rr
r	Rr	rr

Ex: red + white flowers making pink, curly + straight hair making wavy

3. Co-dominance = heterozygous phenotype shows both the dominant AND recessive trait (co-captains)

$RR = \text{red}$

$Rr = \text{red AND blue}$

$rr = \text{blue}$

	R	r
R	RR	Rr
r	Rr	rr

Ex: roan cows (both red and white fur), human blood types (A+B)

4. Polygenic Traits = traits that are determined by more than one gene

Ex: skin tone, hair color, height