

Name: _____

Hour: _____

Types of Dominance - Exceptions to Mendel

Complete (Simple) Dominance: when one allele's phenotype completely MASKS the other

Ex. Purple pea flowers vs White pea flowers

FF = Purple

Ff = Purple

ff = white

Most traits however don't follow this simple pattern...

Incomplete Dominance: when the combination of two different alleles results in a BLEND of the phenotypes

Ex: Snapdragon Flowers

RR = Red snapdragon flowers

Rr = Pink snapdragon flowers

rr = White snapdragons

	R	r
R	RR red	Rr pink
r	Rr pink	rr white

ex. Incomplete Pass = falls somewhere "inbetween" the two

Codominance: when the combination of two different alleles results in them BOTH being EXPRESSED simultaneously

- Because there is essentially more than one dominant trait, you'll use a different letters for each allele

Ex: Roan Cows

RR = red fur

RW = roan (red + white) fur (spots)

WW = white fur

	R	W
R	RR red	RW roan
W	RW roan	WW white

ex. Co-captains: both show up to the game, "cooperate"

Multiple Alleles: When more than 2 allele possibilities exist in a population

Ex: Human eye color (blue, brown, hazel, green, gray)

Human Blood Types (A, B, AB, O)

Polygenic Inheritance: traits that are the cumulative result of the Combined effects of MANY genes

- Phenotype is affected not only by the alleles present, but also the other genes present and the environment

Ex: Human skin and eye color
hair



[Faint handwritten notes and diagrams, possibly related to Mendelian inheritance, including terms like 'dominant', 'recessive', and 'heterozygous']

HTS?

HTS?

RR = red
Rr = pink
rr = white

	R	r
R	RR	Rr
r	Rr	rr

ex. Co-dominance: both alleles are expressed to the same "color"

Human Blood Types (A, B, AB, O)
Human eye color (blue, brown, green, grey)
Human hair color (black, brown, red, blonde)