

# Mendelian Exceptions (Non Mendelian Traits)

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# Incomplete Dominance

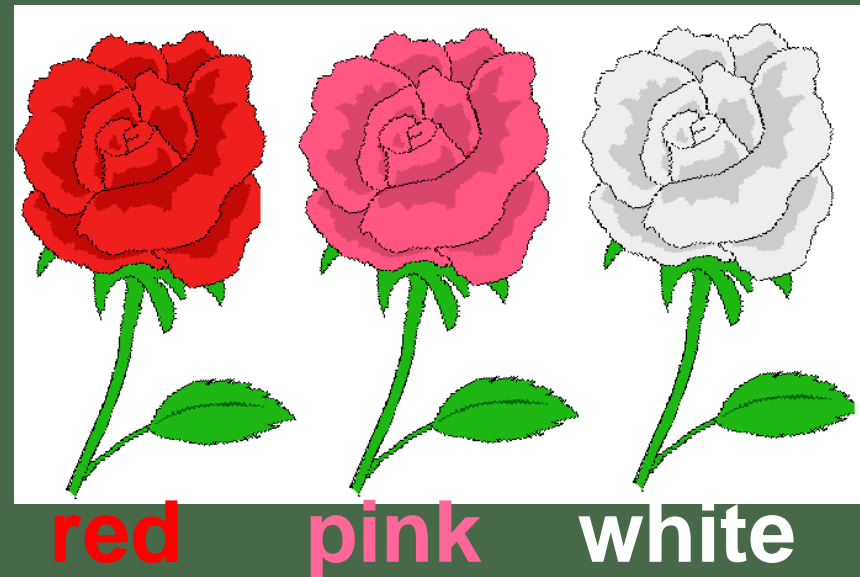


A. A cross between organisms with two different phenotypes

1. Ex: Red (RR) x White (WW)

B. Produce offspring with a third phenotype that is a **blending** of the parental traits

1. Ex: Pink (RW)



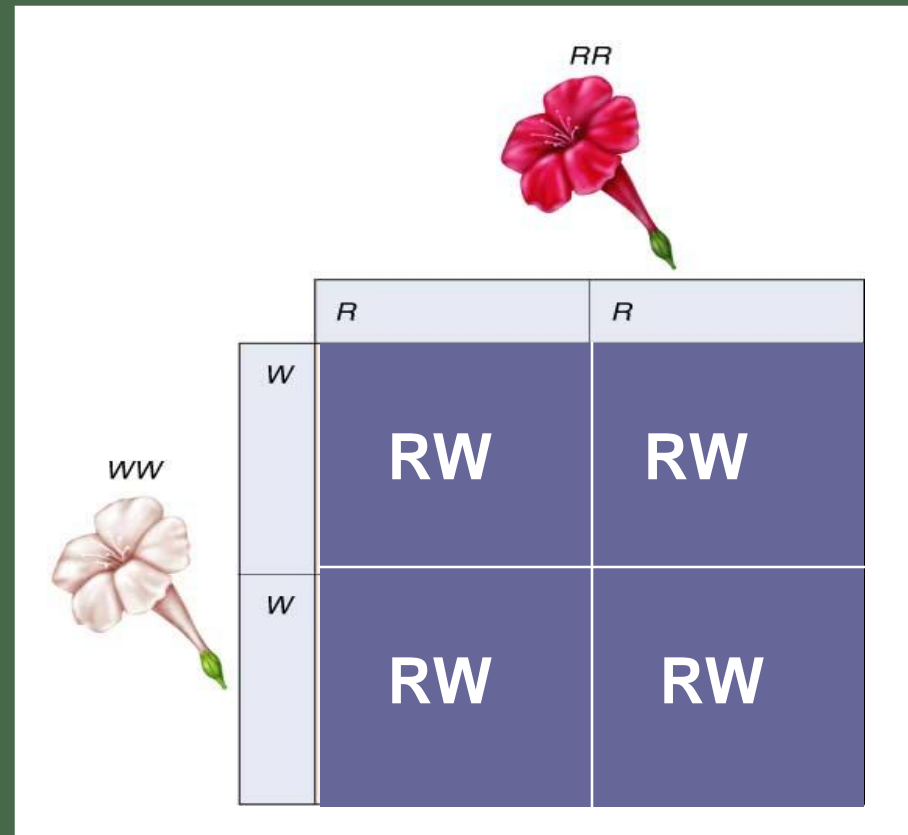
# Incomplete Dominance



C. EXAMPLE: If a homozygous red flowered snap dragon plant (RR) is crossed with a homozygous white flowered snap dragon plant (WW), all of the F1 offspring will have pink flowers.

RED flower x WHITE flower → PINK flower

D. The phenotypes of heterozygous individuals is intermediate (in the middle) between those of two homozygotes





# Incomplete Dominance

- In another flower, if red RR and blue BB flowers are crossed, they produce a 3<sup>rd</sup> purple RB flower
- What would be the genotype ratio and phenotype ratio if you crossed two purple flowers?



# Incomplete Dominance

- Cross of two purple flowers  
RB X RB
- What are gamete possibilities?
- genotype ratio  
**1RR : 2RB : 1BB**
- phenotype ratio  
**1red : 2 purple : 1 blue**
- Can you have a heterozygous red or hybrid blue flower? no

	R	B
R	RR red	RB purple
B	RB purple	BB blue

