















Mendel's Laws & Monohybrid Crosses Notes

Mendel's Conclusions

- In his crosses each trait had a _____ which masked, or dominated the other factor for a specific trait.
- The other trait we call the _____.

Mendel's Seven Traits

	Flower Color	Flower Position	Pod Color	Pod Shape	Pod Color	Pod Shape	Height
Dominant	 purple	 axial	 yellow	 round	 green	 inflated	 tall
Recessive	 white	 terminal	 green	 wrinkled	 yellow	 constricted	 short

Mendel's Conclusions

- Law** _____: Each organism contains two factors for each trait; factors segregate in the formation of gametes. When two gametes combine during fertilization, the offspring have two factors controlling a specific trait.
- Law of** _____: states that factors for different characteristics are distributed to gametes independently.

Genetics Vocabulary

- _____ - the unit of heredity; a section of DNA sequence encoding a single protein
- _____ - two genes that occupy the same position on homologous chromosomes and cover the same trait
- _____ - a fixed location on a strand of DNA where a gene or one of its alleles is located



- Homozygous** - _____
- Heterozygous** - _____
- Phenotype** - _____
- Genotype** - _____
- _____ - the trait that appears in the heterozygous condition.
- _____ - the trait that is masked in the heterozygous condition.
- Monohybrid cross** - cross involving a single pair of genes, one trait
_____ - "parents" _____ - "kids" _____ - "grandkids"
- _____ - used to aid in predicting the probability that certain traits will be inherited by offspring
- _____ - is the likelihood that a specific event will occur or is the likely outcome a given event will occur from random chance

How To: Monohybrid Crosses

Ineeda Know Ph.D. is trying to identify the potential genotypes of offspring of a White male rabbit and a heterozygous black female rabbit. Black is dominant to white in bunnies.

	Steps	Notes	Example
1	Determine the dominant and recessive trait		
2	Assign letters for the trait		
3	Determine genotype for parents		
4	Put parents on the square		
5	Determine genotype of offspring		
6	Determine genotype ratio		
7	Determine phenotype ratio		