Tongue rollers are dominant over non-tongue rollers. Cross a homozygous tongue roller with a heterozygous tongue roller. List all of the possible phenotypes and genotypes of the offspring and the probability of each.

homozygous tongue roller

T T

heterozygous tongue roller

T t

phenotypes

TT,Tt

genotypes

	T	T
T	T T Tongue roller	T T Tongue roller
t	T t Tongue roller	T t Tongue roller

Jan 6 - 12:55 PM

This is a Punnett Square

Jan 6 - 12:55 PM

Cross two heterozygous people.

	B	b
B	BB	Bb
b	Bb	bb

What do you notice?

Jan 6 - 12:55 PM

Cross two heterozygous people.

	B	b
B	BB	Bb
b	Bb	bb

What is the total probability that offspring could have the dominant (B) trait?

Jan 6 - 12:55 PM

Cross two heterozygous people.

	B	b
B	BB	Bb
b	Bb	bb

What is the total probability that offspring could have the recessive (b) trait?

Jan 6 - 12:55 PM

Tongue rollers are dominant over non-tongue rollers. Cross a homozygous tongue roller with a heterozygous tongue roller. List all of the possible phenotypes and genotypes of the offspring and the probability of each.

homozygous tongue roller

TT

heterozygous tongue roller

Tt

	T	T
T	T T Tongue roller	T T Tongue roller
t	T t Tongue roller	T t Tongue roller

phenotypes

tongue roller

genotypes

TT, Tt

Jan 6 - 12:55 PM

Cross two heterozygous brown-eyed people (blue eyes are recessive).

Bb Bb

	B	b
B	BB brown	Bb brown
b	Bb brown	bb blue

phenotypes 3:1

Brown, blue

genotypes 1:2:1

BB, Bb, bb

Jan 6 - 12:55 PM

Dimples is a dominant trait. A mother that is heterozygous for the gene for dimples with her husband who has no dimples. — dd

Dd

	D	d
d	Dd dimples	dd no
d	Dd dimples	dd no

phenotypes 2:2

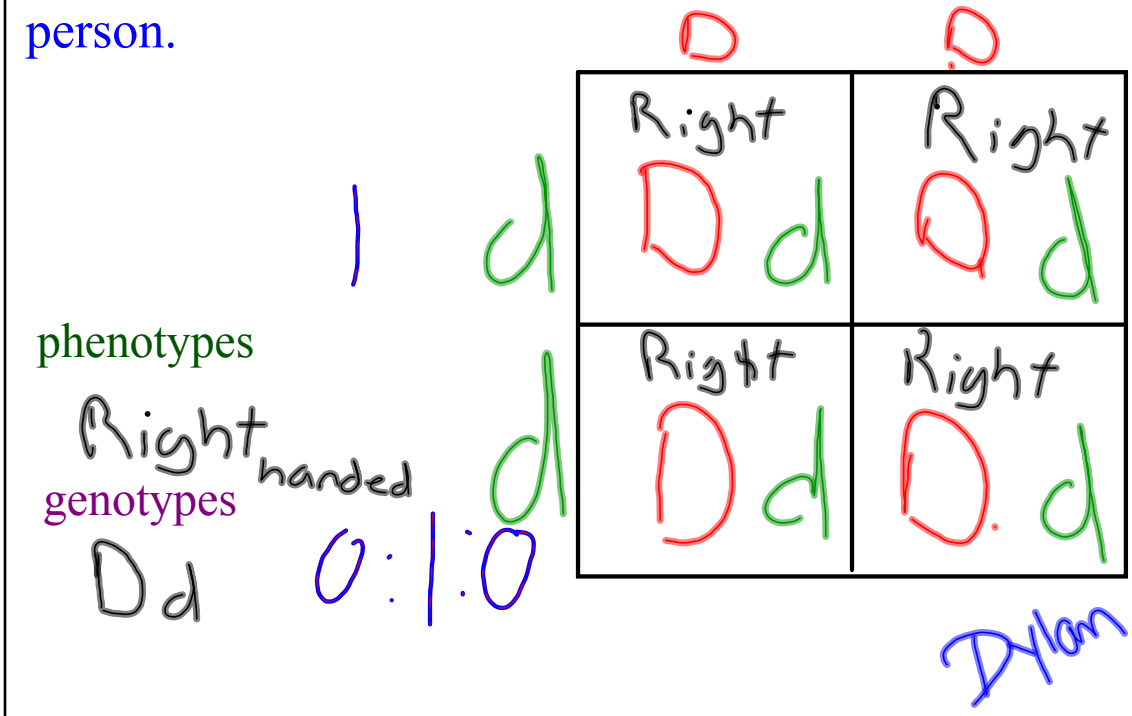
dimples, no

genotypes 0:2:2

Dd, dd

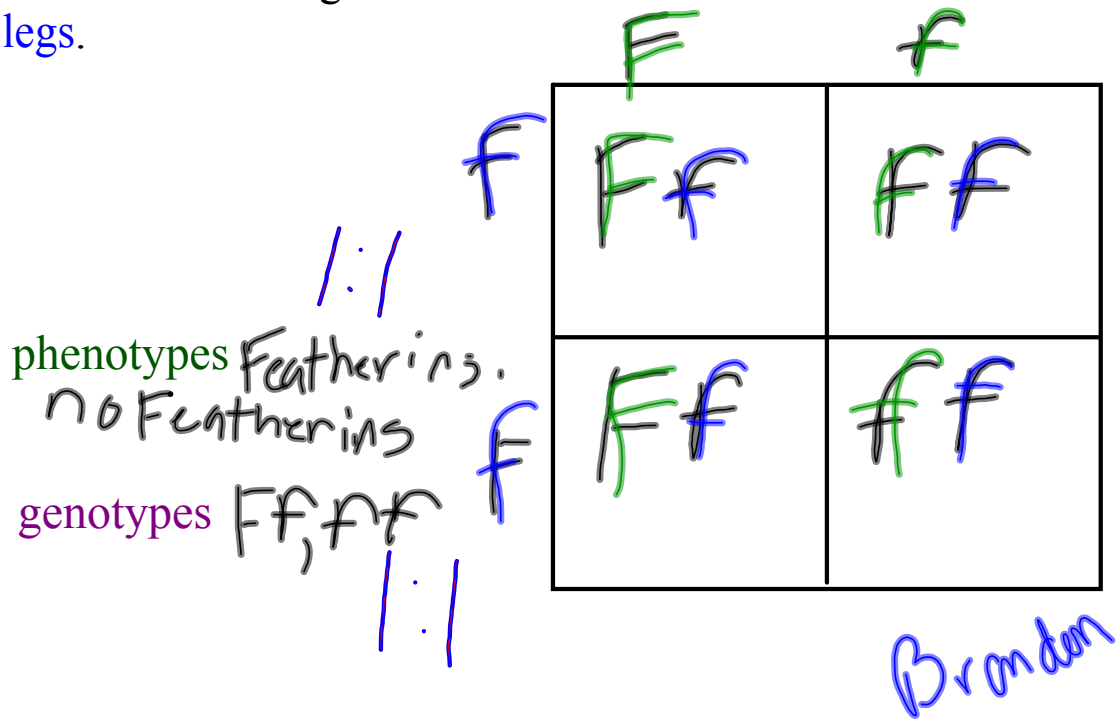
Jan 6 - 12:55 PM

Handedness in humans is hereditary with right-handedness dominant to left handedness. Cross a homozygous right-handed person and a left-handed person.



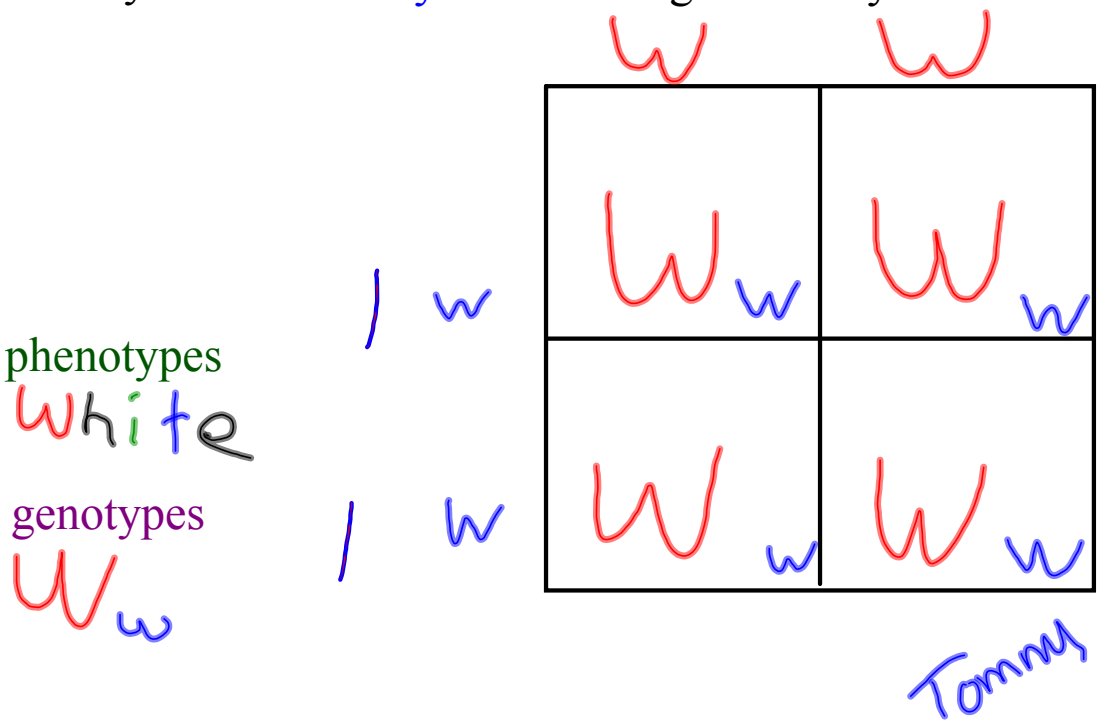
Jan 6 - 12:55 PM

Feathering on the legs of chickens is due to an allele, F. Absence of feathers is due to f. A heterozygous hen with feathers on her legs is mated with a rooster that has bare legs.



Jan 6 - 12:55 PM

In cabbage butterflies, white color (W) is dominant and yellow color (w) is recessive. Cross a pure white cabbage butterfly mates with a yellow cabbage butterfly.



phenotypes

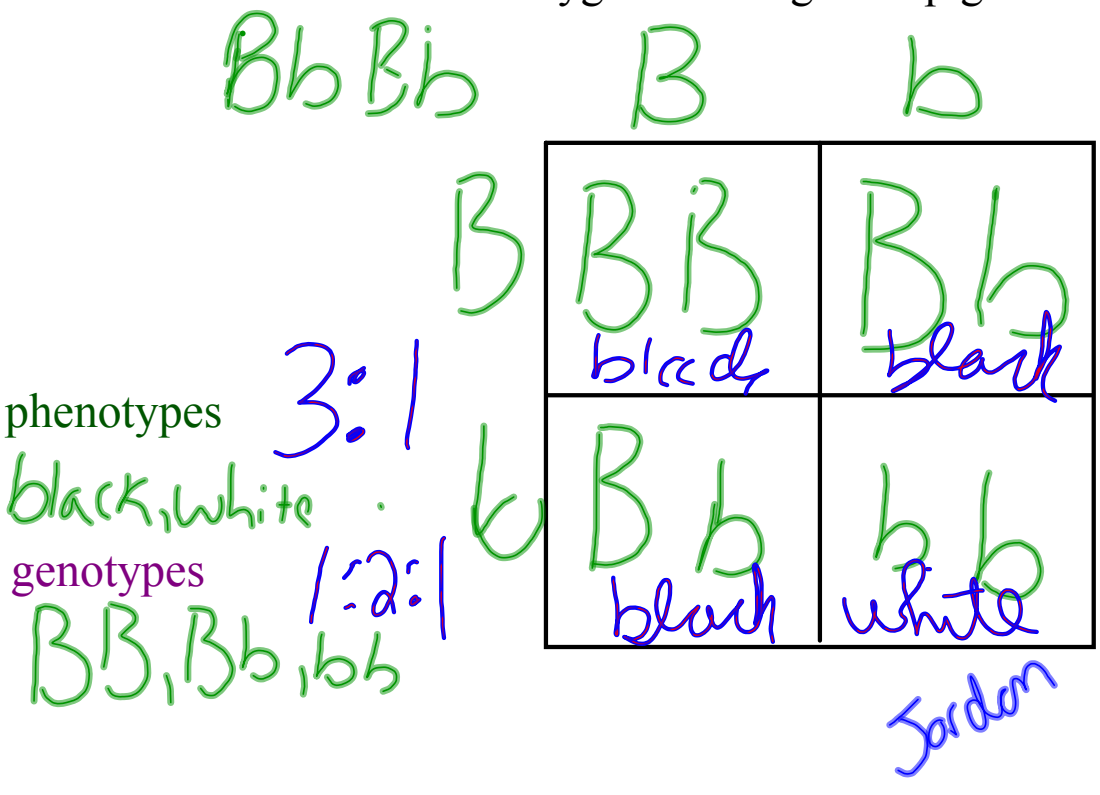
White

genotypes

Ww

Jan 6 - 12:55 PM

In guinea pigs, black coat color is dominant over white coat color. Cross two heterozygous black guinea pigs.



phenotypes

3:1

black, white

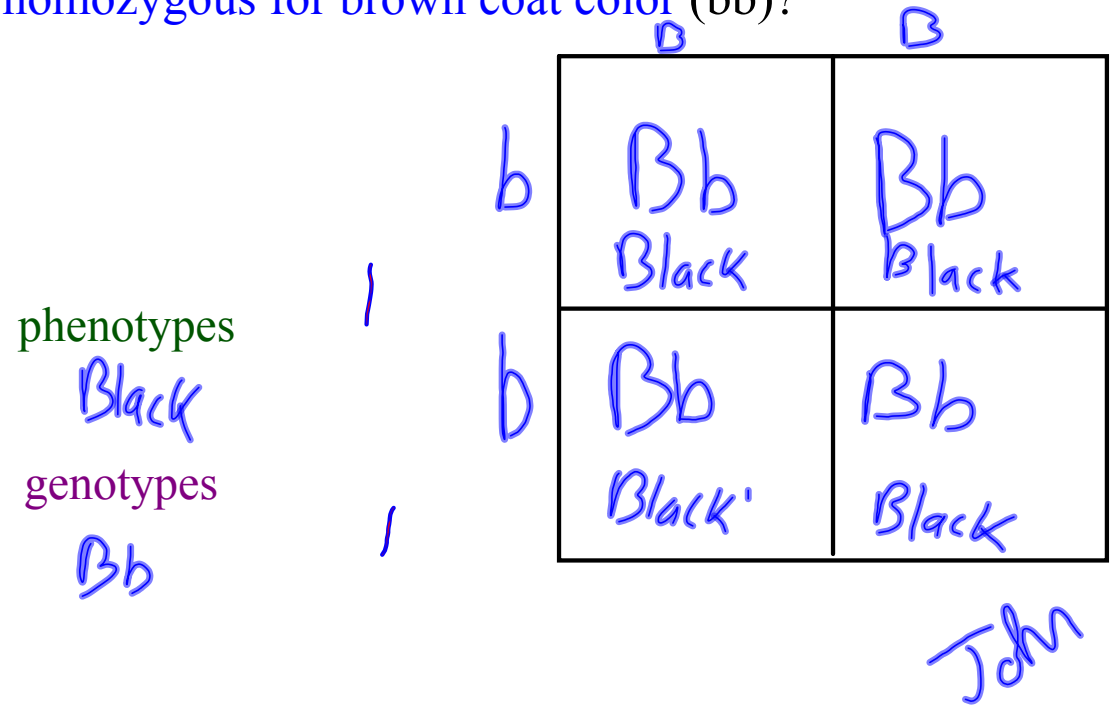
genotypes

1:2:1

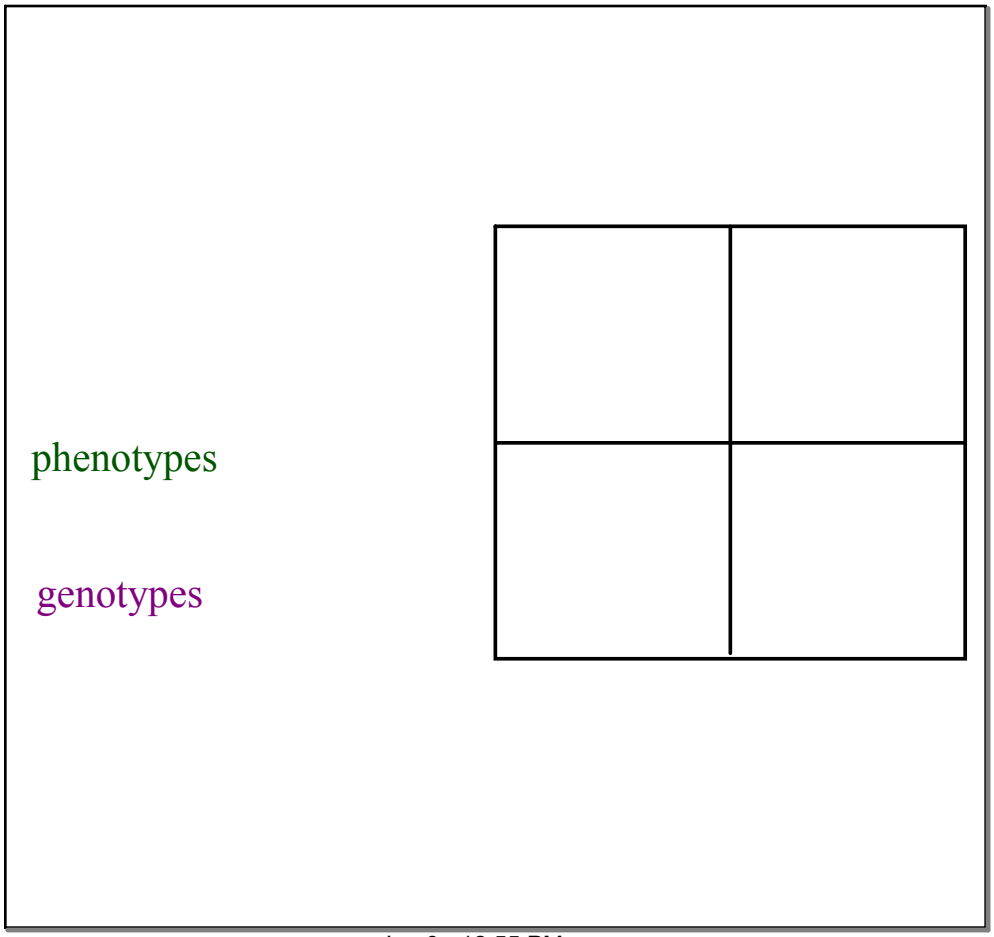
BB, Bb, bb

Jan 6 - 12:55 PM

In rabbits the allele for black coat color (B) is dominant over the allele for brown coat color (b). Cross an animal homozygous for black coat color (BB) and one homozygous for brown coat color (bb)?



Jan 6 - 12:55 PM



Jan 6 - 12:55 PM

Attachments

PunnettSquaressites.doc