

This is a Punnett Square

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

Rr

R

RR



r

heterozygous tongue roller

R

	R	Rr
R	RR TR	Rr TR
r	Rr TR	rr NR

phenotypes

tongue-roller R

genotypes

RR, Rr

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

Bb
 Bb

B

b

B

BB Brown	bB Brown
Bb Brown	bb blue

phenotypes

Brown, blue b

genotypes

BB, Bb, bb

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

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

phenotypes

dimples, no

genotypes

Dd, dd

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

phenotypes

Right handed, ~~left handed~~

genotypes

~~RR~~, Rr

	R r	r
R	RR r	Rr
R	RR r	Rr

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**.

	F	f
f	Ff	ff
f	Ff	ff

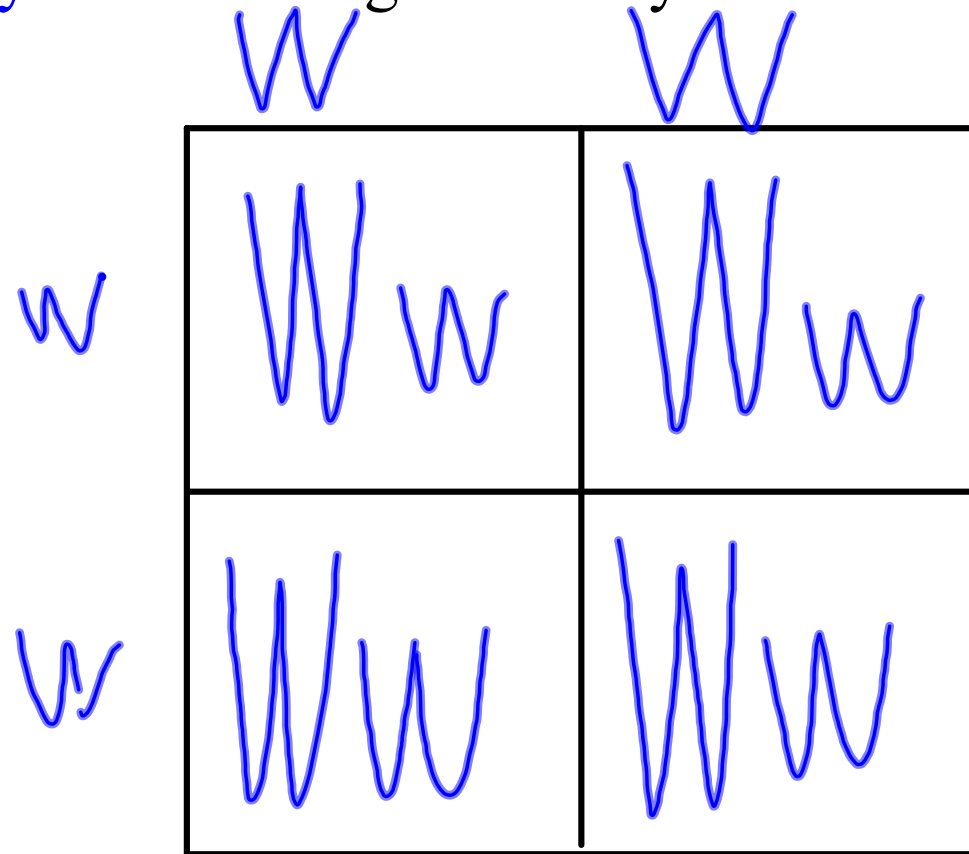
phenotypes

Feathers or no feathers

genotypes

Ff, ff

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

All white

genotypes

Ww

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

	B	b
B	BB	Bb
b	Bb	bb

phenotypes
black, white

genotypes
BB, Bb, bb

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)?

phenotypes

Black

genotypes

Bb

b	Bb	Bb
b	Bb	Bb

Attachments

PunnettSquaressites.doc