

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

heterozygous tongue roller

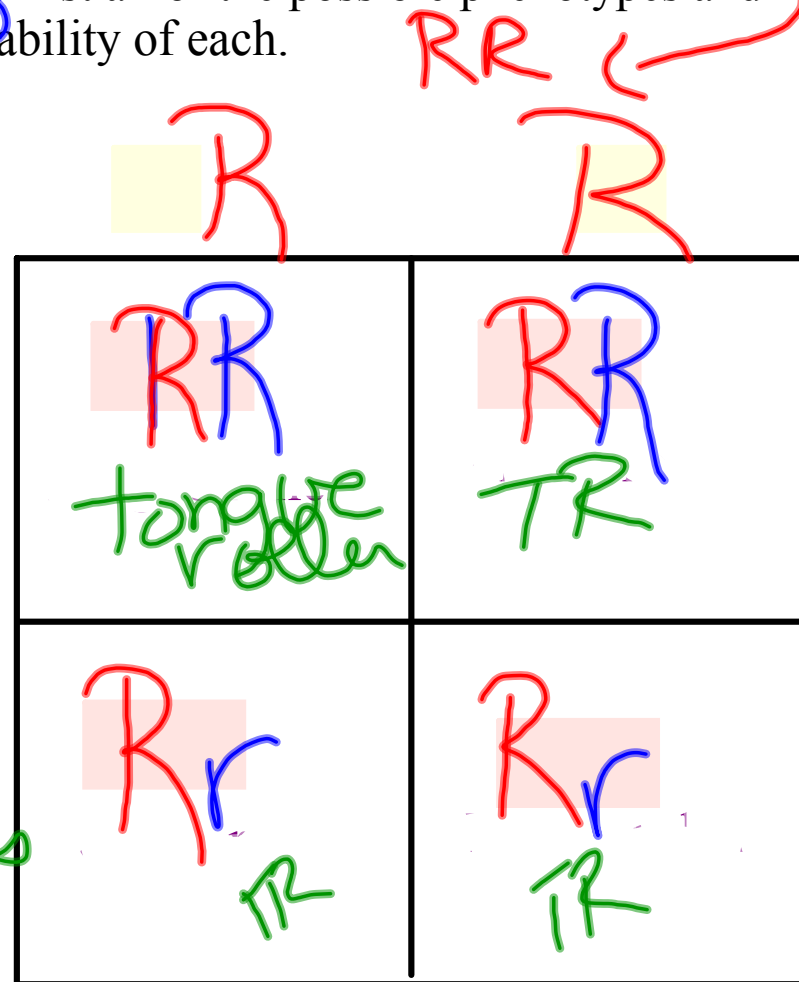
phenotypes

=

genotypes

tongue-rollers

RR, Rr



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

Brown, Blue

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**.

Dd D d
 dd

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

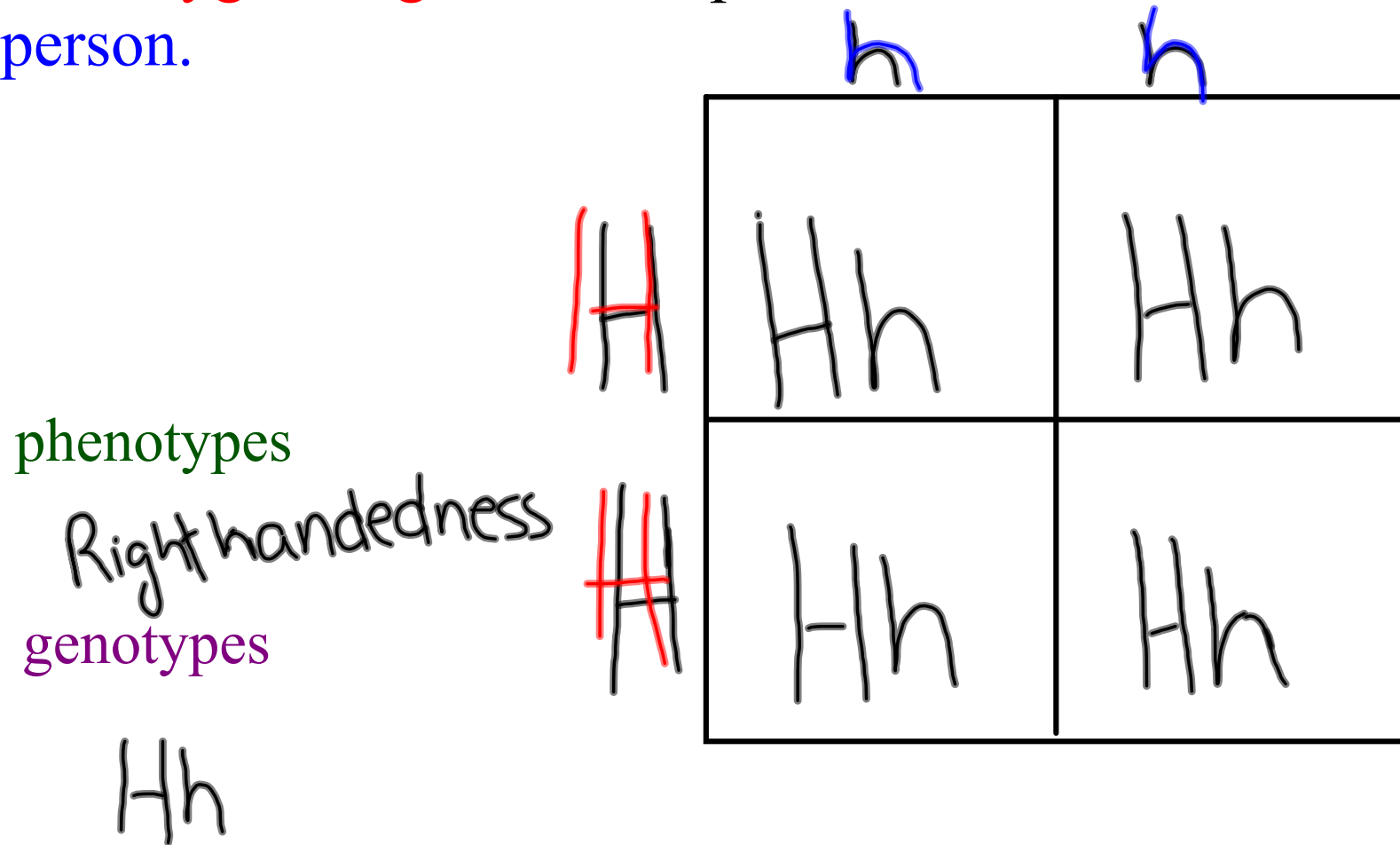
phenotypes

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.



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
 feathered legs
 featherless legs
 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

White
Butterflies
genotypes

Ww

	W	w
w	Ww	Ww
w	Ww	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)?

		B	B
b	B b	B b	
b	b B	b B	

phenotypes
Black coat

genotypes
Bb

Attachments

PunnettSquaressites.doc