

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

	<b>T</b>	<b>T</b>
<b>T</b>	<b>T T</b> Tongue roller	<b>T T</b> Tongue roller
<b>t</b>	<b>T t</b> Tongue roller	<b>T t</b> Tongue roller

This is a Punnett Square


Cross two heterozygous people.

	B	b
B	BB	Bb
b	Bb	bb

What do you notice?

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?

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?

homozygous tongue roller

## phenotypes

genotypes

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

phenotypes

genotypes


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

phenotypes

genotypes




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

phenotypes

genotypes


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**.

phenotypes

genotypes


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

genotypes


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

phenotypes

genotypes


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

genotypes


phenotypes

genotypes


Attachments

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PunnettSquaressites.doc