~Breeding Pairs~

Each rabbit, as we have said, has two variables in its genotype for each characteristic**. One of the variables comes from each parent,** that's how each rabbit has two. We are using forms of the trophy symbol to represent the black/chocolate characteristic. If a black rabbit had a chocolate *sire* (father) and a black *dam* (mother), it's genotype would be 🏆🏆, the black gene from the dam and the chocolate gene from the sire.

A rabbit may give to its offspring either one of its two variables. Every kit gets a chance at receiving either variable. So our 🏆🏆 rabbit may give either a black or a chocolate to each of its offspring. But if you have a black that does not carry chocolate, it will give a black gene to each of its offspring, because the chocolate gene isn't present. All chocolates will give the chocolate gene to every offspring, because if it had a black gene to give, it wouldn't appear chocolate itself.

🏆🏆 bred to 🏆🏆 = 🏆🏆 100%, because both parents can only throw the black gene.

🏆🏆 bred to 🏆🏆 = 🏆🏆 100%, because both parents can only throw the chocolate gene.
Breeding two recessive colors will never ever throw you a dominant one.

🏆🏆 bred to 🏆🏆 = 🏆🏆 100%, because one parent can only throw black and the other can only throw chocolate, so the kits get one of each. They appear black, but they can produce a chocolate. Make sense?

~Breeding Squares~

When we want to know what colors two rabbits can produce, we use a graph called a *Punit Square,* or as we will call them, a *breeding square,* to find the answer. Let's hypothetically breed these rabbits:

Black buck. Does **not** carry chocolate. Genotype is 🏆🏆

Chocolate doe. Genotype is 🏆🏆

Table 1.

X	Dam's gene 1	Dam's gene 2
Sire's gene 1		
Sire's gene 2		

Table 1 is a Punit Square frame that we need to fill in with our parent rabbits' information.

The blue squares are the sire's genes.

The pink squares are the dam's genes.

The purple squares are the offspring.