**Rabbit Dihybrid Cross Name: Period:**



* In rabbits, grey hair is dominant to white hair.
* Also, black eyes are dominant to red eyes.

GG = gray hair Gg = gray hair gg = white hair

BB = black eyes Bb = black eyes bb = red eyes

1. What are the **phenotypes** (descriptions) of rabbits that have the following genotypes?
* Ggbb \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* ggBB \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* ggbb \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* GgBb \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. What are the possible **genotypes** of rabbits that have the following phenotypes:
* Gray hair & black eyes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Gray hair & red eyes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* White hair & black eyes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* White hair & red eyes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. A male rabbit with the genotype **GGbb** is crossed with a female rabbit with the genotype **ggBb**.

Find out the possible gamete combinations for the male and female rabbits, put them on your Punnett square, and fill it out to determine the ratio of the different phenotypes in the offspring.

* Male gamete combinations:
* Female gamete combinations:
* What is the ratio of offspring with grey fur and black eyes?
* What is the ratio of offspring with grey fur and red eyes?
* What is the ratio of offspring with white fur and black eyes?
* What is the ratio of offspring with white fur and red eyes?



1. A male rabbit with the genotype **GgBb** is crossed with a female rabbit with the genotype **GgBb**.

Find out the possible gamete combinations for the male and female rabbits, put them on your Punnett square, and fill it out to determine the ratio of the different phenotypes in the offspring.

* Male gamete combinations:



* Female gamete combinations:
* What is the ratio of offspring with grey fur and black eyes?
* What is the ratio of offspring with grey fur and red eyes?
* What is the ratio of offspring with white fur and black eyes?
* What is the ratio of offspring with white fur and red eyes?

1. A male rabbit with genotype **GgBb** is crossed with a female rabbit with genotype **ggbb**. Find out the possible gamete combinations for the male and female rabbits, put them on your Punnett square, and fill it out.

Record all the different phenotypes of the offspring and their ratio.

 