## **Calico Cat Genetics Answer Key**

Calico is a coat color found in cats, which is caused by a SEX-LINKED, CODOMINANT allele.

B = Black

R = oRange

BR = calico

The following genotypes are possible;

Female cats can be black X<sup>B</sup>X<sup>B</sup>, orange X<sup>R</sup>X<sup>R</sup>, or calico X<sup>B</sup>X<sup>R</sup>

Male cats can be black XBY or orange XRY

Show each of the crosses below and include the phenotypic ratios of the offspring.

- 1. A black male crossed with an orange female
- 2. An orange male crossed with a calico female
- 3. A black male crossed with a black female
- 4. An orange male crossed with an orange female
- 5. A black male crossed with a calico female

<sup>\*\*</sup>If you are a cat breeder, what type of parents should you choose to have the MOST number of calico kittens?