### Coat Color Inheritance Chart (b & e)

#### Phenotype | Genotype | Coat Color | Nose Color
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black | BBEE | pure for black | Black
yellow | BBEe | black carrying yellow | Black
chocolate | BbEE | black carrying chocolate | Black
| BbEe | black carrying chocolate and yellow | Black
| Bbee | pure for yellow | Black
| bbEE | yellow carrying black and chocolate | Brown/Liver
| bbEe | chocolate carrying yellow | Brown/Liver
| bbee | yellow carrying chocolate | Brown/Liver

Once your dog has been tested and you know its genotype, use this table for breeding strategies and breeding stock selection.

For example, if your results show that your dog is a BbEe (Type IV) and you were to mate your dog with a bbEe (Type IX), the resulting litter would, on the average, have 37.5% black puppies (BBEE and BbEe), 25% yellow puppies (Bbee and bbee), and 37.5% chocolate puppies.

These probabilities represent expectations averaged over the long run and are subject to the law of probabilities.

Note that yellow dogs can have either black or brown/liver noses depending on the contribution of B or b from the parents. Any dog that inherits at least one B from either parent will have a black nose.