



# THE CFSO'S BEGINNER'S GUIDE TO CAVALIER COLOUR GENETICS



## Basic Principles of Cavalier Colour Genetics

Phenotype is what the dog looks like.

Genotype is the genetic makeup.

Dominant genes will cover up effects of Recessive genes.

Whole Colour is Dominant, Parti Colour is Recessive.

Black is Dominant, Red is Recessive.

Each Cavalier carries separate genes for coat pattern & colour.

**\*\* each percentage prediction is for EACH puppy, not for the overall litter\*\***

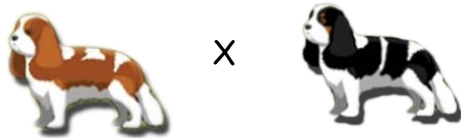
## PARTI COLOUR CROSSES



Blenheim carries only Parti Colour/Red



100% puppies will be Blenheim



Blenheim x Tri with Red gene



50:50 Blenheim or Tri with Red gene puppies



Blenheim x Tri no Red gene



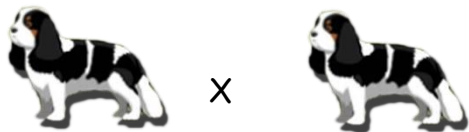
100% puppies Tri with Red gene



Tri with Red gene x Tri with Red gene



25% Blen 25% Tri no Red 50% Tri with Red



Tri with Red gene x Tri no Red gene



50:50 Tri with Red gene or Tri no Red gene

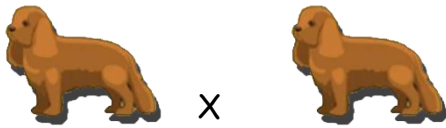


Tri no Red gene x Tri no Red gene



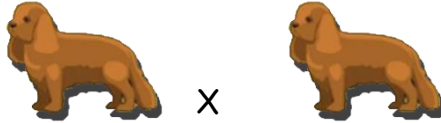
100% puppies Tri with no Red gene

WHOLE COLOUR CROSSES



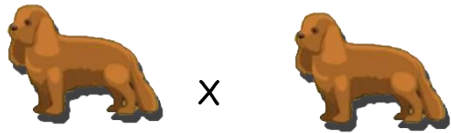
Ruby no Parti gene x Ruby no Parti gene

100% Ruby no Parti gene



Ruby no Parti gene x Ruby with Parti gene

50:50 Ruby with Parti or no Parti gene



Ruby with Parti gene x Ruby with Parti gene

50:50 Blenheim or Ruby with Parti gene



Blenheim x Ruby with Parti gene

50:50 Blenheim or Ruby with Parti gene



Blenheim x Ruby no Parti gene

100 % Ruby with Parti gene



Tri no Red gene x Ruby no Parti gene

100% BT with Red/Parti genes



Tri no Red gene x Ruby with Parti gene

50:50 Tri with Red or BT with Red/Parti



Tri with Red gene x Ruby no Parti gene

50:50 Ruby with Parti or BT with Red/Parti

WHOLE COLOUR CROSSES



X



Ruby no Parti x BT no Parti/ no Red



100% BT no Parti/ with Red



X



Ruby no Parti x BT with Parti/with Red



50:50 Ruby or BT each 50:50 with Parti



X



Ruby with Parti x BT no Parti/no Red



50:50 BT with Parti/with Red : BT no Parti/ with Red



X



Ruby no Parti x BT with Parti/no Red



50:50 BT no Parti/with Red : BT with Parti/with Red



X



Ruby with Parti x BT with Parti/no Red 50 BT with Parti/Red 25 BT Red/no Parti 25 Tri w Red



X



BT no Parti/no red x BT no Parti/no Red



100% Dominant BT no Parti/no Red



X



BT no Parti/with Red x BT no Parti/no Red

50 Dominant BT :50 BT no Parti/with Red



X



BT with Parti/Red x BT no Parti/no Red

50 BT with Parti: 50 BT no Parti  
50 BT with Red: 50 BT no Red

WHOLE COLOUR CROSSES



Blenheim x BT with Red/no Parti gene



50:50 Ruby with Parti or BT with Red/ Parti



Blenheim x BT no Red/with Parti gene



50:50 Tri with Red or BT with Red/Parti



Blenheim x BT no Red/no Parti gene



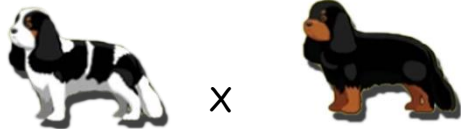
100 % BT with Red/Parti genes



Tri with Red x BT with Red/no Parti



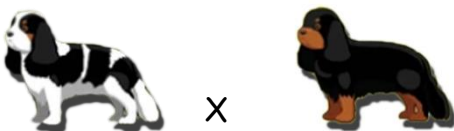
25 Ruby w Parti 25 BT Par/no Red 50 BT w Par/Red



Tri with Red gene x BT no Red/no Parti gene



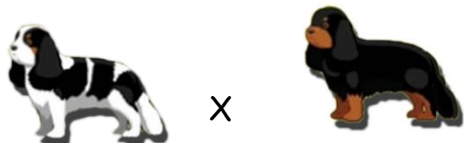
50:50 BT w Red/Parti or BT w Red/no Parti



Tri no Red gene x BT with Red/Parti genes



50:50 Tri or BT 50:50 with Red or no Red



Tri no Red gene x BT no Red/ with Parti



50:50 Tri or BT both no Red gene



Tri no Red gene x BT no Red/no Parti genes



100% BT with Parti gene, no Red gene



X



BT with Parti/Red x BT no Parti/with Red

50:50 dom whole colour: whole colour with Parti  
50 Black with Red:25 Black no red: 25 Red

How to get the possibility for ALL FOUR COLOURS

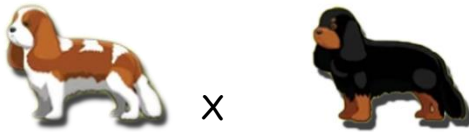


X



Tri with Red gene x Ruby with Parti gene

every pup carries Red gene

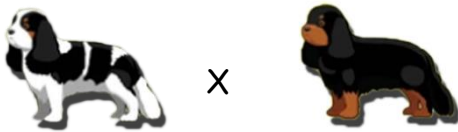


X



Blenheim x BT with Red/Parti genes

every pup carries Red gene



X



Tri with Red gene x BT with Red/Parti genes

Tri/BT have 50:50 chance of Red gene



X



Ruby with Parti x BT with Parti/with Red

50:50 Red or Black

25 Ruby/BT no Parti :50 Ruby/BT with Parti: 25 Bl/Tri with Red



X



BT with Parti/Red x BT with Parti/with Red

50 Black with Red:25 Black no Red: 25 Red  
50 Whole Colour with parti:25 dom whole colour:25 Parti

