

INTRO TO CAT GENETICS LAB PART 2




Sex-linked trait –

- a trait where the gene is located on a sex chromosome (female/X or male/Y);
Example: colorblindness
(+ = dominant; c = recessive)
 - Female = XX
 - X^+X^+
 - X^+X^c
 - X^cX^c
 - Male = XY
 - X^+Y
 - X^cY

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CAT GENETICS LAB: SEX LINKED LOCUS

- The O Locus**
 - O = orange fur
 - oo = other genes expressed
 - $X^O X^O$ or $X^O Y$ = orange fur
...**Remember:** XX is female and XY is male.
 - $X^O X^o$ = Tortoiseshell (at least two colors, no white)
 - $X^O X^o$ and Ss = Calico (many colors with white)
 - $X^o X^o$ = other genes expressed – no orange fur

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