



THE AUSTRALIAN CAT FEDERATION (Inc.)

ACF GUIDE TO FELINE TERMINOLOGY

NOTE:

This is a work in progress document, but for now needs to be released.

It is already recognised that there are some anomalies/inaccuracies to be resolved plus some terms that require further research before being included. Also, new information relevant to the Cat Fancy is being released daily, so it stands to reason that over time there will be additions/deletions and amendments to the document.

The original intent was to have 1 Glossary dealing **only** with terms contained in the Book of Standards and to be included in said book.

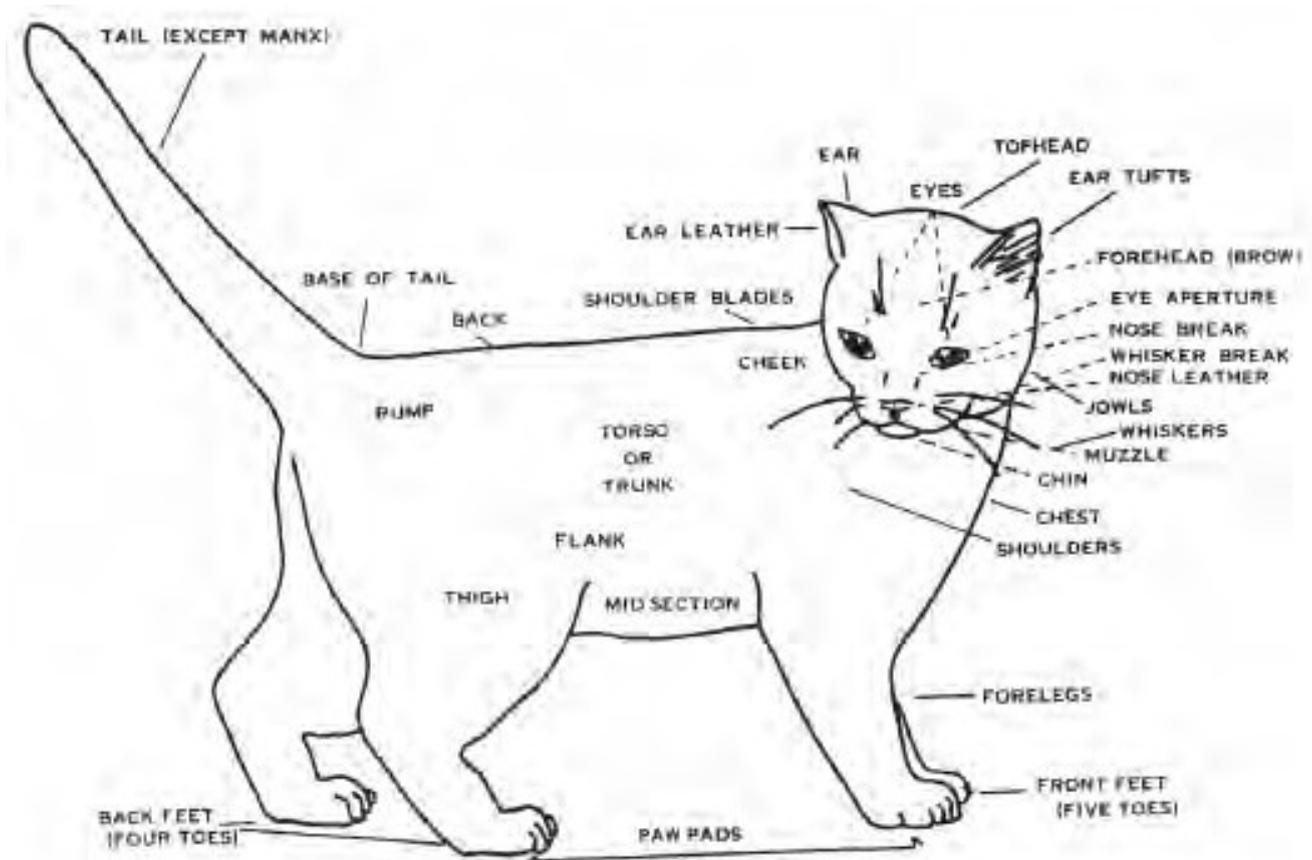
However, there are many additional terms that are relevant to others in the cat fancy (e.g., a need to define equivalent terms from other organisations and basic genetic/veterinary terms) that should also be included.

So rather than having multiple glossaries with necessary duplications, a single Glossary of all terms is considered best to cover the requirements for current judges, cadet judges, registrars, breeders, and exhibitors etc.

It is also suggested that instead of having this glossary included in the Book of Standards it would be better to have it as a stand-a-lone document on the ACF website for easy downloading as required. So, it is suggested that document become By-Laws Part 7.

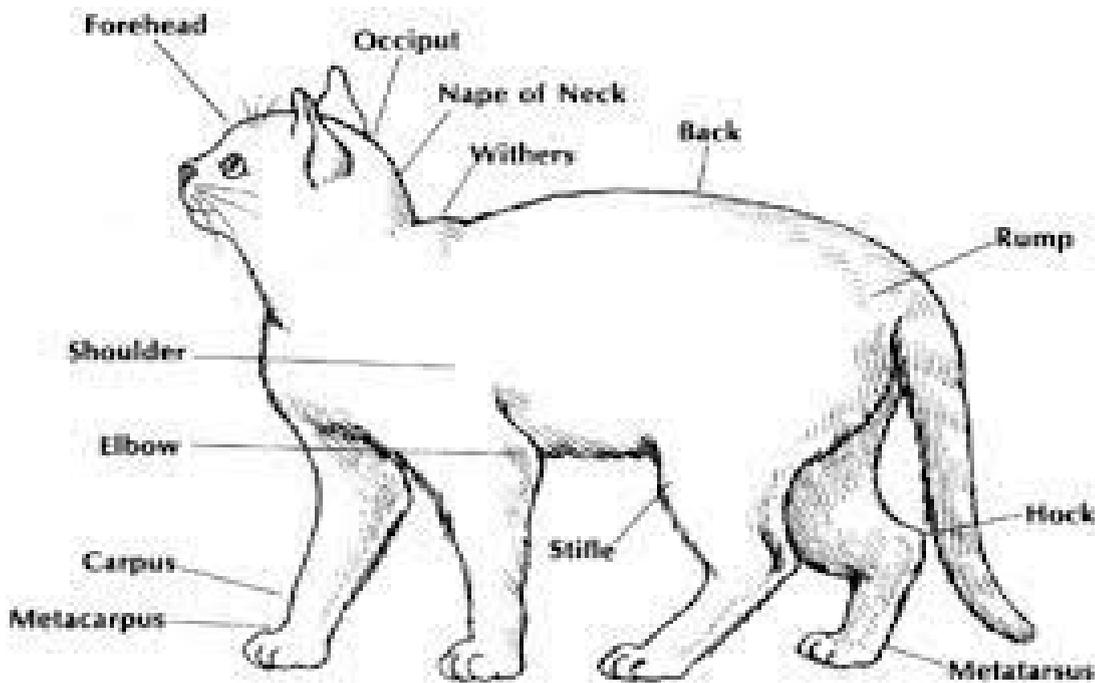
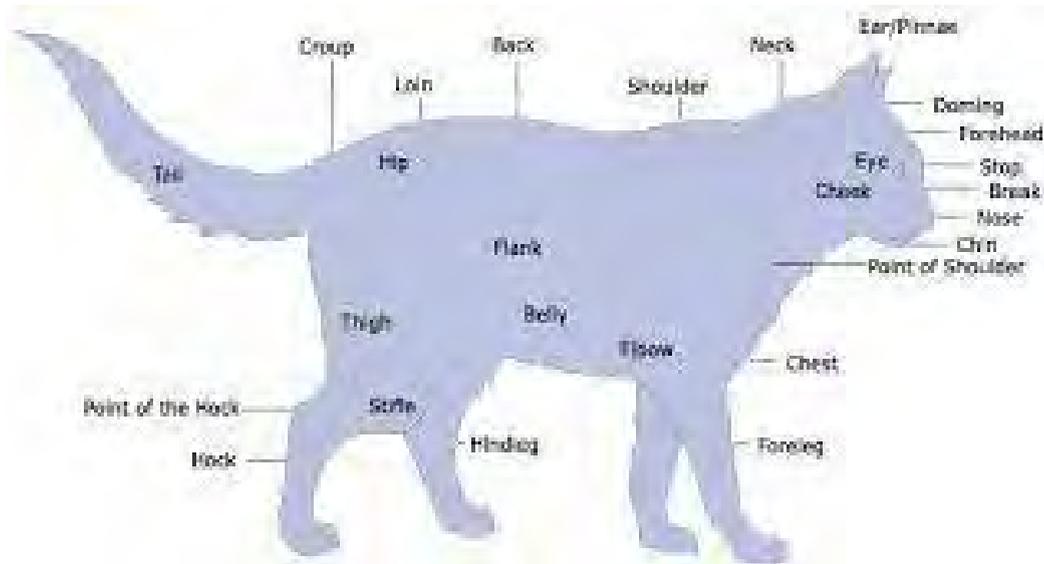
Only the standard solid colour descriptions recognised by ACF (Inc.) have been listed, with the other patterns just listing the colours as the Book of Standards has descriptions for these colours. Those that are listed separately are generally there to indicate colour terms used in other organisations and its equivalent in ACF (Inc.) terms. Additional explanations are included for colours/shapes that are labelled as recognised foods.

Parts of the Cat

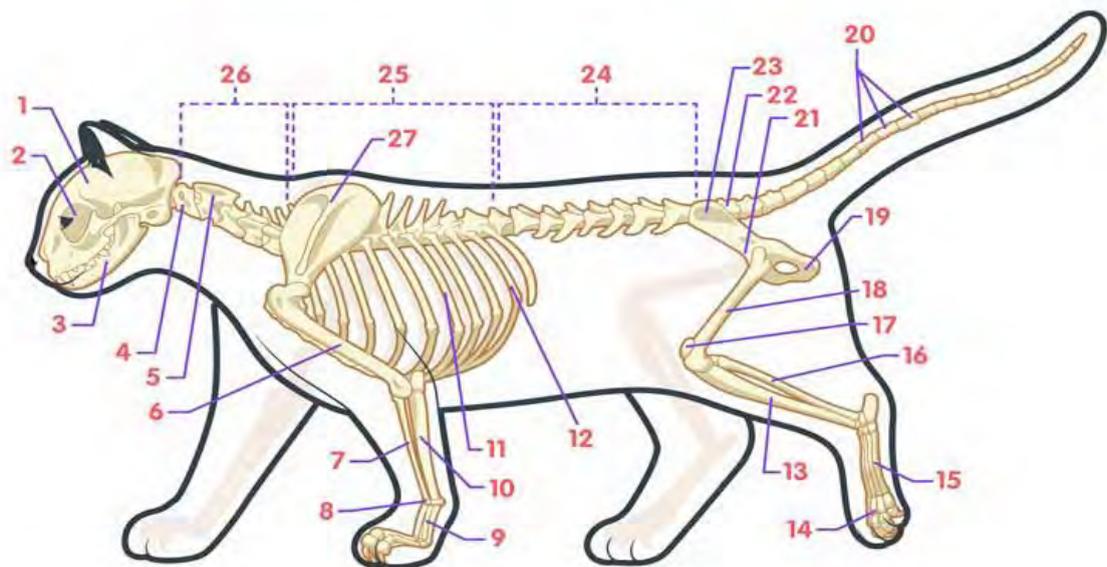


This or next?

Parts of the Cat



Bones of the cat



- | | | | |
|-------------|--------------------------|----------------------|------------------------|
| 1. Skull | 8. Carpals | 15. Metatarsals | 22. Sacrum |
| 2. Orbit | 9. Metacarpals | 16. Fibula | 23. Ilium |
| 3. Mandible | 10. Ulna | 17. Patella | 24. Lumbar vertebrae |
| 4. Atlas | 11. Rib | 18. Femur | 25. Thoracic vertebrae |
| 5. Axis | 12. Bony part of the rib | 19. Ischium | 26. Cervical vertebrae |
| 6. Humerus | 13. Tibia | 20. Caudal vertebrae | 27. Scapula |
| 7. Radius | 14. Phalanges | 21. Pubis | |

GLOSSARY OF TERMS

A	
ACF Award of Excellence	A certificate awarded by the Judge when in their opinion, a cat is deemed to be of a standard of excellence of not less than 95%. In each Group 1, 2 & 3 an entire male and female and a desexed male and female (whether titled or not) is eligible for this award per ring.
ACF Companion Award of Honour	A single certificate is awarded by the Judge when in their opinion, the adult cat is deemed to be of sufficient merit to be awarded Best Adult Companion in Show per ring. Note: this may change should proposal 9.4 at the July 2021 GM be accepted.
Adult	A cat, entire or desexed, over the age of 9 months.
Agouti 	The gene that bands the hairs. An agouti hair is banded with alternate bands of light and dark colouring. In standard varieties the light colour is yellow and in silver varieties, the light colour is silvery white. In general, each hair has 3 to 5 bands.
Agouti Signalling Protein (ASIP)	A protein which signals a melanocyte to switch from eumelanin to phaeomelanin production by binding to the melanocortin receptor. Variants of this gene can mask or modify the tabby phenotype by causing over expression of eumelanin.
Albino/Albinism	Lack of pigmentation caused by the lack of functional tyrosinase enzyme, resulting in a coloration of white with pale blue eyes.
Allele	A gene may mutate to produce a new variety of that gene. Each allele is capable of producing a distinctive phenotype.
Allowable Outcross	A breeding between two cats, not of the same breed or breed group, that is permitted by the ACF (Inc.) By-Laws Part 2: Breeding and Registration Rules.
Almond Shape	Refer to Eye Shape.

Amber (1)/Light Amber (2)	<p>Only recognised in Norwegian Forest Cats. Coat colour is:</p> <ol style="list-style-type: none"> 1) Apricot-to cinnamon 2) Pinkish-beige to fawn-like colour. <p>Note:</p> <ul style="list-style-type: none"> • A gene variant in MCR 1-gene (E-locus) results in an inability to produce eumelanin. • It causes the gradual replacement of eumelanin (black pigment) with phaeomelanin (red/orange pigment). • This is <u>Age dependent colour maturation</u>; all kittens are initially black tabby or blue tabby for the dilute coat. As the kittens mature, the black/blue stripes gradually turn to yellow and golden coloration. The black becomes amber and the blue light amber. • Adults show an apricot/cinnamon-like colour or pinkish beige/fawn-like colour, called amber light with a few dark hairs on the back and tail and dark eye rims. • The original black or blue coat colour remains only on the tail tip. • The amber coat colour (amber variant in MCR1* gene - is marked as allele e) is inherited as an <u>autosomal recessive</u>; it is expressed only in homozygous cats, an individual with both amber alleles (e/e). <p>*MCR1 – melanocortin 1 receptor gene</p> <p>When activated MC1R initiates the production of the brown or black pigment eumelanin.</p>
Amelanistic	<p>The absence of melanin (the pigment responsible for colour) in a cat's coat and skin. Amelanistic hair will appear white, while amelanistic skin will appear pink.</p>
Any Other Colour (AOC)	<p>A non-recognised colour or pattern in ACF (Inc.) in a certain breed of cat.</p>
Any Other Variety (AOV)	<p>A term to classify cats that are the registered offspring of registered parents but are not eligible to enter cat show classes because they do not have the official requirements for coat colour, coat length or other physical characteristics.</p>
Auburn	<p>Coat colour is reddish-brown colour.</p>
Autosomal	<p>Independent from sex.</p> <p>This term is used in genetics, when speaking of autosomal inheritance, i.e., sire and queen may inherit a trait.</p>
Awn Hairs	<p>The intermediate hairs in a cat's coat. They are shorter than the guard hairs and longer than the down hairs. They help with insulation and protect the down hairs underneath. Most of the visible coat is made of this kind of hair.</p> <p>Refer also to Guard Hairs, and Down Hairs and Coat Composition.</p>
Awry	<p>Refer to Wry Mouth.</p>

B	
Balance	Describes the physical proportions of a cat' body.
Bars/Barring	Lines or stripes (tabby striped markings) particularly on the legs and tail.
Belly Spot/s	1) Distinct circles of colour on the belly area. Associated generally with tabby patterns. Such spotting is required. 2) A dark spot in the lower abdomen of cats with Himalayan pattern which is the same colour as the points. This is considered a fault.
Best in Show	An exhibit which in the judge's opinion, comes closest to meeting the breed standard among all other competing cats in the show.
Best of Breed	An exhibit which in the judge's opinion, comes closest to meeting the breed standard among all other competing cats of that breed.
Bi colour Pattern	<p>Is a pattern where a cat has white (patches which is caused by gene S (Piebald Spotting) and any other one, two (in the case of torties) solid colours. A cat has a coloured head, back, and tail with white on legs, feet, underside, and lower flanks. A white blaze such as the inverted "V" pattern is often seen.</p> <p>Various markings of white and pigment may occur, but the cat is generally, $\frac{1}{3}$ to $\frac{2}{3}$ white.</p> <p>Note: Every depiction has white toes.</p>
	
Blaze	<p>1) A white patch between the eyes, starting at the forehead and mostly extending down and beside the nose. Bi-coloured and Tricoloured cats often have a blaze.</p> <p>2) A cream or red patch between the eyes in tortoiseshell varieties which starts at the forehead and mostly extends over the nose. Known as a Flamme in some organisations.</p>
Blotched	Refer to Classic Tabby.
Bobtail	A cat whose tail is shortened and may have curves and/or kinks the end looks like a pom pom. As seen in the Japanese Bobtail/Pixiebob.
Bracelets	Ring markings on the legs of tabby cats.

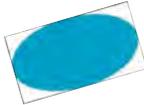
<p>Braided</p> 	<p>Irregularly fluid linear markings that are inter woven and branching, as the stripes on a tiger. Characteristic of some tabby markings. As seen on Toygers.</p>
<p>Break</p>	<p>A very strong indentation of the nose between the forehead and the base of the nose (which compared to a stop is not rounded).</p>
<p>Breeches/Britches</p>	<p>The longer and thicker hair on the back of the upper hind legs.</p>
<p>Breed</p>	<p>Cats sharing common ancestor and similar physical characteristics.</p>
<p>Breed Standard</p>	<p>A detailed description of a breed of pedigree cat providing a means of distinguishing criteria used by judges and breeders to achieve the perfect breed. Refer also to Standard of Points.</p>
<p>Brick Red</p>	<p>Dark muted red with purplish/mauve tones. Used to describe the nose leather colour in certain breed colours.</p>
<p>Brindling</p>	<p>The effect caused when incorrect coloured hairs are interspersed in an otherwise solid coat colour. e.g., white, or lighter coloured hairs in the dark mask of a seal Siamese or lighter hairs in the black pattern of a tabby.</p>
<p>Brindled Hairs</p>	<p>White, lighter, or darker coloured hairs in Solid (self) cats or in the coloured areas of a coat pattern. For example, white or light coloured, but also dark coloured hairs in red/cream cats single white or light-coloured hairs in the coloured areas of Bi-coloured cats.</p>
<p>Bronze</p>	<p>Coat colour that is a rich warm red ground colour ticked with dark brown spotting and ticking. As seen in Egyptian Maus.</p>
<p>Brush</p>	<p>A bushy featherings or plume-like tail of a longhaired cat.</p>
<p>Brush Coat</p>	<p>Usually, Peterbald's are hairless. There is a coat type which has a fine, soft, and short down, which can be felt - one feels a certain resistance when stroking with the hand over the skin.</p>
<p>Bulls Eye</p>	<p>A mark found on the side of the body of a Classic Tabby that is characterised by a solid, circular spot or darker colouring surrounded by a ring of darker colouring.</p>
<p>Butterfly Markings</p>	<p>The pattern on shoulders of a Classic Tabby resembling a butterfly (with both wings, upper and lower wings clearly seen on the shoulder blades), when viewed from above.</p>
<p>Buttons</p>	<p>Refer to Belly Spots (in tabby varieties).</p>

C	
Calico	A term used in some organisations to describe a coat that is predominantly white, with patches of two other colours (generally red and black). Also called Tricolour.
Cameo	A former description for red and cream shaded and shell (tipped) patterns in ACF (Inc.) It is still used in some organisations.
Castration	Refer to Neutering.
Challenge	A certificate awarded by the Judge to an adult cat winning first place in the Open Class at a show.
Champagne	In some organisations and specific breeds, the colour chocolate is called this.
Champion	A title that is earned after accumulating a designated number of challenge certificates/points over several Shows under different judges. The first step towards gaining higher titles.
Charcoal Pattern	Definite contrast between ground colour and dark markings, with distinct shapes, and clearly defined edges. Pattern to have a horizontal flow. There must be white, or nearly white spectacles or “goggles” encircling the eyes. A dark mask (“Zorro” mask) runs all the way from the nose bridge to the nose and connects from the mascara lines all the way to the nose bridge. A wide, dark, “cape” running down the length of the back is desirable. Colour on chest and belly should be lighter than ground colour.
Chestnut 	Coat colour that is medium reddish shade of brown. In some organisations and specific breeds, the colour chocolate is called this.
Chinchilla	Is a coat pattern in tabby cats with an extremely high amount of silver: 7/8 of the entire length of the hair shaft is silver-white, only the tip of the hair is coloured, called Tipping (tipped). There exist Silver Chinchilla and Golden Chinchilla. The term is found in Persians/Exotics and British Shorthair. Refer also to Shell and Tipped.
Chromosome	A threadlike structure of nucleic acids and protein found in the nucleus of most living cells, carrying genetic information in the form of genes. Of the chromosomes 1 pair determine the sex and are called the sex chromosomes (X or Y – females XX, males XY), the others are called autosomes.

<p>Classic Tabby</p> 	<p>A form of tabby patterning showing large patches of solid colour (also referred to as “blotched” tabby).</p>
<p>Coat Composition</p>	<p>There are three main types of hair that makeup the normal coat:</p> <ol style="list-style-type: none"> 1) guard hairs, 2) bristle or awn hairs, and 3) down or woolly hairs. <p>Refer also to Guard hairs, Awn hairs and Down Hairs.</p>
<p>Cobby</p>	<p>Having a short, compact heavy-boned body, with broad shoulders and rump and low on legs. Usually goes along with a short tail and a large, rounded head. As seen in Persian/Exotic Shorthairs.</p>
<p>Cold Tone</p>	<p>Coat colour exhibiting blue or grey tinges.</p>
<p>Colourpoint</p>	<p>A cat that is coloured only at the extremities or points (i.e., mask on the face, ears, legs, and tail). The body fur can range from an off- white to beige. This is also called Himalayan pattern. These cats have blueeyes.</p> <p>Refer also to Point Colour.</p>
<p>Compact</p>	<p>Closely or neatly packed together opposite of rangy.</p>
<p>Companion Pet</p>	<ol style="list-style-type: none"> 1) A kitten or cat not conforming to any recognised pedigree breed (Domestic). 2) A kitten or cat having one recognised pedigree parent (Part Pedigree). 3) A kitten or cat from a 1st generation Breed Development Program that has been deemed “pet only” by the breeder (Hybrid). 4) A kitten or cat conforming to a recognised pedigree breed that has been deemed “pet only” by the breeder (Household Pet). <p>Maybe either longhaired or shorthaired. All exhibits over 9 months must be desexed.</p> <p>Can compete in designated classes at cat shows.</p>
<p>Concave</p>	<p>Curve shaped like the inside arc of a circle.</p>
<p>Condition</p>	<p>Referring to the state of well-being of the cat, i.e., general health, fitness, proper weight, muscle tone, and grooming are all considerations.</p>
<p>Conformation</p>	<p>The form of a cat made up of the size and shape of a breed. Also called type.</p>
<p>Contrast</p>	<p>The visibly noticeable difference in colour between two coat colours on a cat.</p>
<p>Convex</p>	<p>Curve shaped like the outside arc of a circle.</p>

Cow Hocking	Condition in which a cat has back legs which are not parallel, the hocks are very close together. Considered a fault.
CPC	Denotes a colourpoint carrier. Applicable to registration and pedigrees.
Crisp	Firm, not soft or limp. Refers to British Shorthair coat texture.
Cryptorchid	A male cat whose testicles have not descended into the scrotal sack.
Curled Ears	The ears curve up and back, away from the face. As seen in American Curls.

D	
Declawed	The surgical removal of the cats' claws. Considered a Disqualification.
Dam	A female parent of a cat (also known as a queen).
Dense Coat	Heavy undercoat, thick, hairs are crowded together.
Depth of Flank	Determined by viewing the flank from top to bottom; the area between the rib cage and the thigh e.g., the Manx/Cymric will have greater depth of flank; the Cornish Rex will have minimal depth of flank.
Dew Claw	The first digit found on the inside of the leg above the front paws.
Dilute	Colouration which is pale in tone due to uneven deposition of pigment granules in the hair. A recessive colour. Blue, Lilac, Fawn, Cream and Caramel are dilute colours.
Disqualify	To remove from competition. A Judge may disqualify a cat, when in their opinion, it displays a disqualify condition under the General Remarks for Disqualification or as listed in the standard for the breed.
Desexed	A cat, male or female, that has had its reproductive capability removed. Refer also to Neuter and Spey.
Domestic	A non-pedigree cat. Refer also to Companion Pet.
Dominant	A gene is dominant if it prevails over any other allele of the gene. One copy of a dominant gene is sufficient to show the phenotype of that gene. By convention, the letter representing the gene is in upper case (A, B etc).
Doming	A term describing the rounded part of the head between the ears.
Double Coat	Having a thick undercoat with another topcoat of longer hairs. The awn hairs may be the same length as the guard hairs (as in the Russian) or there may be longer guard hairs (as seen in Manx).
Down Hairs	Short, soft, crimped, base hairs. Refer also to Coat Composition.

E		
Ear Furnishings	Hairs extending horizontally from the ears.	
Ear Tufts	Hairs extending vertically from the tips of the ears.	
Ebony	In some organisations a black Oriental SH/LH is called this.	
Entire	A cat, male or female, that has not been desexed.	
Entropion	When the eye lids are rolled inwards.	
Equilateral Triangle	Where all sides are the same length. Used to describe the required head shape in certain breeds i.e., Siamese or Snowshoe.	
Eumelanin	Dark pigment that is visually black, chocolate, or cinnamon. Creates the colours blue, lilac, or fawn when combined with the “dilute” trait.	
Exhibit	The term referring to an individual or group of individuals cat/kitten entire or desexed at a show.	
Extremities	These are mask on the face, the ears the legs and the tail. Refer also to Points.	
Eyes Set Well Apart	There is no less than the width of an eye between the eyes.	
Eye Shape	There are 6 basic shapes for cats.	
 <p>Round</p> 	 <p>Oval</p> <p>Elliptical eye shape. Reducing in size at ends.</p> 	 <p>Almond</p>  <p>Not quite the same, is it?</p>
 <p>Walnut</p> <p>Having a rounded shape of a walnut; a slightly flattened circle; not quite an oval.</p> 	 <p>Hooded</p>	 <p>Lemon</p> <p>A rounded lemon eye shape</p> 

F	
Fault	A judge would “deduct” (penalise) from an exhibit a portion, or all, of the points allotted to a specific part of the standard for that exhibit.
FCK	Flat Chest Kitten Syndrome. The chest of the kitten is flattened or depresses.
Feline Immunodeficiency Virus (FIV)	A virus that attacks the cat’s immune system.
Feline Infectious Peritonitis (FIP)	A corona virus infection of the membrane lining cavity. This disease leads to death.
Feral Cat	A large wild cat living in the Australian Bush. Not to be confused with urban strays also known colloquially as “ferals”.
Flame Point	In some organisations red points are called this.
Flank	The part between the ribs and thigh at either side of the body.
Flared	Spread out.
Folded Ears	The ears fold downward toward the face. This is a dominant gene affecting the cartilage. As seen in Scottish Folds.
Foreign Type	A physical characteristic defined by a long, elegant body.
Flock	A coat type which has a fine, soft, and short down hair which can be felt. As seen in Peterbalds. Refer also to Velour.
Foreshortened	Shorter than normal; usually due to the fusion of vertebrae of the spine in the lumbar and spinal area of the cat (back and tail). Associated with Scottish Folds where flexibility is reduced, and thickness is increased.
Frill	The thick hair that extends around the neck and down the chest and front legs of a long or semi long-haired cat. Also called a ruff.
Frost/Frost Point	In some organisations the colour lilac is called this.
Fungus	A primitive form of plant life that can be parasitic. Refer also to Ringworm.

G	
Gauntlets	The white markings on the back side of the hind legs ideally ending in a point. As seen in Birmans.
Gene Pool	Total of all the genes, dominant and recessive, that exist in a certain breed of cat.
Genotype	The hereditary characteristics of an individual cat, whether it can be seen or not.
Genes	The individual hereditary units that control growth, development, and the physical characteristics of a cat. They are found on specific locations on a chromosome.
Ghost Markings	Faint tabby markings seen in solid-coloured (non-agouti varieties) cats particularly on the legs and tail e.g., red cats; smoke cats)

Glitter	The natural deep glow, shine or sparkle created by a clear layer or bubbles within the hair shaft which reflects light readily. As seen in Bengals and Toygers.
Gloves	Front paws have white gloves, preferably ending in an even line across the paws at the third joint (where toes meet paws) (scalloped in the Ragdoll). The back paws have white gloves covering the front of each paw, extending up the back of the legs ending in a point approximately halfway up the hock. These are called "gauntlets". As seen in Birmans.
Ground Colour	Is the basic colour of the coat, on which the pattern is imposed. 1) The area of colour on the lower part of the hair shaft; also, the agouti area between the markings in the tabby patterns. 2) The colour over which or through which pattern or tabby markings are visible.
Gold	Coat colour is old gold markings against a rich warm cream ground colour. This is the Australian Mist term for cinnamon.
Golden	Coat is: 1) Tipped - a ground colour of warm cream to light apricot with black tipping 2) Shaded - a ground colour of warm cream to light apricot with black shading. (In Persians, the golden cat is a chinchilla cat without the inhibitor gene (A-B-Wb-) Wb = wide band)
Guard Hairs	The coarse outer layer and the longest of the hairs forming a cat's coat. Refer also to Coat Composition.
Gypsy Shag	Loose and bouncy hair of different lengths (layered). Appearance of "a permanent" losing its tight curl. Semi long hair loosely curled at varying lengths, rather than all one length. As seen in LaPerms.

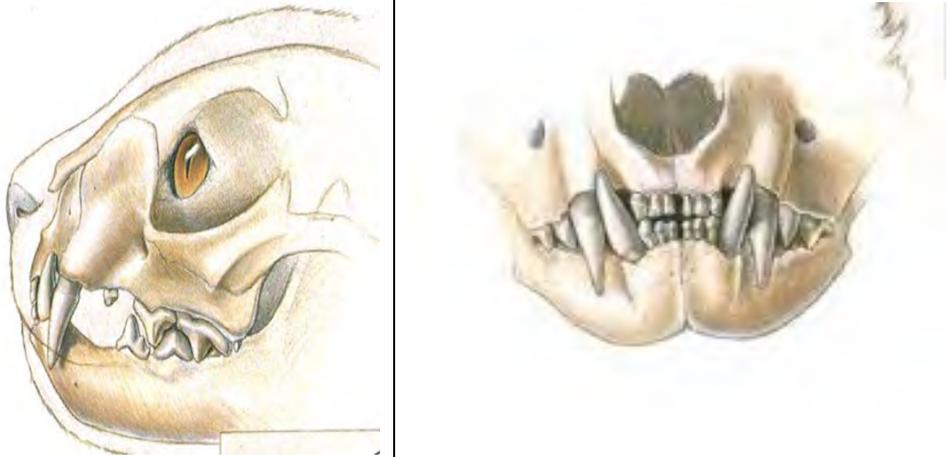
H	
Hard in texture	A coat texture that is dense and firm to the touch. As seen in American Shorthairs.
Hairlessness	Relative absence of noticeable coat. Hairlessness is not usually absolute in the cat. In the Sphynx there maybe hair on the points and the body is often covered with a down similar to suede.
Harlequin	Is a pattern attributable to the S gene (Piebald Spotting) and where the amount of white is 5%. There are coloured patches (3-5 patches) on the head and body. The belly is white. Not a recognised ACF Inc. pattern. Refer also to Piebald Spotting.
Havana/Havana Brown	1) A Chocolate Oriental SH/LH is called this in some organisations. 2) In some organizations the Havana is a distinct breed, whose standard differs somewhat from that of the Oriental.
Haw	Refer to Nictitating Membrane.
Hazel	Light brown, flecked with yellow or green refers to eye colour.

Heterozygous	If both genes in a gene pair for a specific trait are different from each other the cat is considered to be heterozygous for this trait.
Himalayan Pattern	Refer to Colourpoint or Point Colour.
Hock	The joint of the hind leg corresponding to the ankle in humans. The joint between the knee and the top of the foot.
Homozygous	If both genes in a gene pair for a specific trait are the same the cat is considered to be homozygous for this trait.
Horizontal Crimp	Is located near the base of the ear. As the cartilage comes up out of the skull, it forms a heavy horizontal ridge usually completely across the width of the ear. This 'opens' the ear, flattening it out, so the natural cupping of the ear base is deformed giving the ear a very wide 'inside out' appearance. The ear begins its curvature from this unpleasant ridge, rather than the normal base of the ear. Can be seen in a wide range of expression from mild to severe. May also display thickened cartilage, with ridges and bumps. This genetically undesirable trait may or may not have 'correct' curvature, is not aesthetically pleasing to the eye, sometimes bends back almost to the head, is unpleasant to the touch. This may also negatively impact the ear canal. Horizontal Crimp - mild, can be hidden under longhair. It is a trait that MUST be identified by touch. A fault in American Curl ears.
Hot Cream	The colour cream is said to be hot if it is too reddish in tone.
Household Pet	Refer to Companion Pet.
Hybrid	The progeny of crossing two different breeds.
Hybrid vigour	Increased vitality resulting from breeding cats of two different breeds together.

I	
Inbreeding Coefficient	Inbreeding is a method of reproduction, where 2 or more closely related individuals are mated, i.e., at least they have one common ancestor (parent). The inbreeding coefficient is the probability that two alleles, which are located at the same locus for this individual, will be identical in its ancestry (i.e., inheritance of the same allele because of common ancestors).
Incisors	The front teeth present in most mammals. They are located in the premaxilla above and on the mandible below.
Incomplete Dominance	For some genes the alleles can be neither dominant or recessive to each other and together produce an intermediate phenotype.
Inherited	Characteristics which are the result of genetic influences.
Inhibitor	An unidentified, heritable factor that causes the base of each hair to be unpigmented, resulting in silver or smoke coloration.
Intermingled	Coat of two colours mingled together, i.e., blue cream/blue tortie

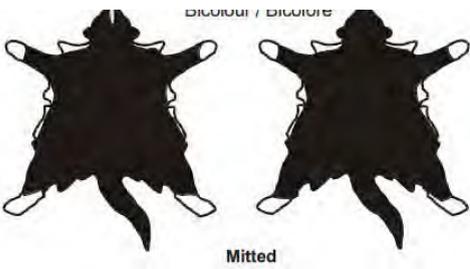
J	
Jowls/stud jowls/stud cheeks/shields	The thickening of the skin over the cheeks in entire male cats.

K	
Karpati Pattern	Only recognised in La Perm. Roan + restricted points + shading, the three things must be together. (black Karpati, red Karpati, blue Karpati, cream Karpati) where the white hairs are evenly interspersed with those colours. Mask, tails, paws, ears are paler.
Kink	A malformation of vertebrae in a cat's tail that produces a bend or twist. A kink is sometimes felt but not seen. Generally considered a Fault.
Kitten	A juvenile cat, entire or desexed, under 9 months of age.
Knickerbockers	Refer to Breeches.

L	
Lavender	In some organisations Lilac is called this.
Lethal Factor	An allele is said to be lethal if homozygous kittens already die as foetus or shortly after they are born. Example: Gene M, homozygous Manx/Cymric would die before their birth, therefore Manx and Cymric are always heterozygous for the gene M.
Level Bite	The upper and lower teeth line up. 
Lift/Loft	A short coat that is soft and woolly and stands up away from the body.
Line Breeding	Mating related cats that have a common ancestor appearing at least one time in the first three generations of both parent's pedigree.
Litter	1) The offspring born from a single mating. 2) The product used in a cat's toilet tray.

Locket	A white spot or group of hairs on a cats' lower neck or chest. Sometimes called a medallion and considered a fault. The white patch is not cause by the Piebald Spotting gene "S".
Long and Substantial	Denoting the type of some breeds, use to indicate longer length of body that is not accompanied by foreign type.
Longie	In some organisations refers to Manx/Cymric with normal tail i.e., tailed Manx/Cymric (Not shown in ACF Inc. but may be used in breeding programmes).
Luxating patella	Genetically transmitted problem that causes the kneecap to slip when the joint is moved. Can cause lameness.
Luxurious Coat	Sensual pleasure to feel. As seen in Bengals.
Lynx Point	Refer to Tabby Point.
Lynx Tufts	Extra-long growth of hair on ear tips.

M	
Mackerel Tabby 	A type of tabby patterning showing fine vertical stripes of solid colour.
Magnolia	Coat colour is off-white with a faint pinkish or lilac tone.
Mantle	Shading heavier than that of tipped varieties, but not as heavy as smoke - gives the impression of a darker mantle over a white base coat.
Marbled Tabby 	<p>A specific tabby pattern, which is derived from the classic tabby pattern, but where the patterning is a long horizontal type of marking, giving the impression of marble.</p> <p>(Lighter centres, coloured in the ground colour are encircled by the dark colour of the pattern).</p> <p>As seen in Bengals.</p>
Markings	Tabby markings such as the 'M' on the forehead, necklaces, bracelets, and rings etc.
Mascara Markings	The lines of darker colour outlining the rim of the eyes in tabby (including silver tabby) patterned cats.
Marcel Wave	A term used in some organisations to describe the uniform ripple-like wave in some Cornish Rex coats.
Mask	A darker area on the face including the nose, whisker pads, chin and around the eyes. As seen in Siamese.

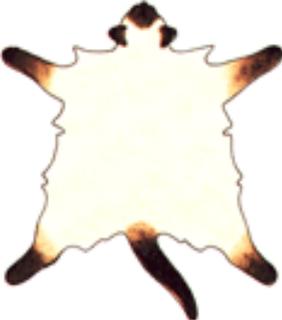
Masking	Also known as epistasis. The presence of some genes is so overriding that they are able to conceal the presence of genes at other loci. Masking is not the same as dominance.
Massive	Large, substantial, and proportionately heavy.
Melanin	The term for a group of pigments in the body giving colour to skin and hair. Produced in pigment cells (melanocytes). <ul style="list-style-type: none"> • Eumelanin – the black pigment. • Genetic mutations of eumelanin lighten the pigment to Brown and Light Brown.
Melanocortin Receptor (MC1R)	A transmembrane protein present in melanocytes that is responsible for signalling the production of eumelanin or pheomelanin pigment. Variants in this gene are responsible for modifying the expression of tabby coloration.
Melanocyte	A pigment producing cell.
Melanophilin (MLPH)	A protein responsible for transporting pigment granules into a growing hair. A recessive variant causes uneven pigment distribution in the fur. Refer also to Dilute.
Metacarpus/Metacarpal Pad	The five bones of the front paw located between the toes and the arch: Metacarpus. The small pad located in the middle of the back of the front paw pad above the third joint and below the wrist bone.
Mi-Ke	Is the name given to the traditional colour tortie with white (tricolour) as seen in Japanese Bobtails.
Mink Pattern	Relates to Burmese/Siamese intermediate Pattern Colour Expression cb cs. As seen in Tonkinese.
Mitted	White Feet. A predominantly coloured cat with white limited to paws, back legs, belly, chest, and chin in most specimens. May also have a blaze. White does not extend beyond the wrist joint on the front feet. The cat is typically about 1/4 white. As seen in Ragdolls. <div style="text-align: center;">  <p>Mitted</p> </div>
Modified Wedge	A type of head that is triangular shaped but shorter in length than a wedge i.e., not as extreme as a wedge. <div style="text-align: center;">  </div>

Moggie	A colloquial name for a domestic cat.
Monorchid	A term for a male cat having only one testicle. A misapplied term for only 1 descended testicle; for which the correct term is unilateral cryptorchid.
Muffs	Thick, soft growth of fur at base of outer edge of ear. As seen in Devon Rex.
Mutation	A change in genotype having no relation to the animals' ancestry. Eg: Gene hr in the Sphinx causes the hairlessness. Gene re in the Devon Rex causes the curled coat. Gene Cu in the American Curl causes the ears to be curved backwards. Gene Se in the Selkirk Rex causes the curled coat.
Muzzle	The protruding part of a cat's head i.e., the nose, whisker pads and jaws.

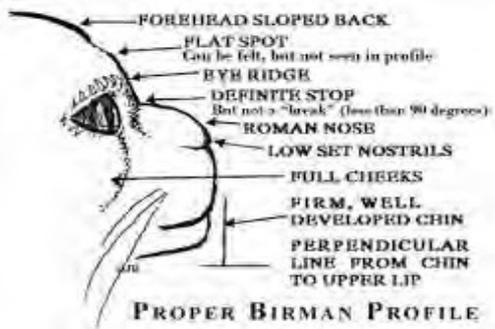
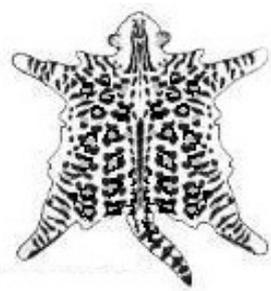
N	
Nasal Aperture	The size of the nostril opening. Too small, restricted, or pinched. Is considered a serious fault.
Natural Breed	Breed without the interference of selective breeding.
Nanism	The condition of being abnormally or exceptionally small in stature. Dwarfism – the underdevelopment of the body; the state of being a dwarf. It may be the result of a developmental anomaly, of nutritional or hormone deficiencies, or of other diseases. Disproportionate Dwarfism – Munchkin fit this category. Where the body is normal size, but the limbs are short. Proportionate Dwarfism – Singapura could fit this category. Where a body is proportionately small if all parts of the body are small to the same degree and appear to be proportioned like a body of average stature. Teacup cats – bred to be proportionally small all over. The disqualification fault was intended to apply to cats that were very small overall, diminutive, comparatively less in size than what the breed standard describes etc.
Necklace	The bars - broken or unbroken - appearing in the neck area in tabby varieties.
Neuter	A desexed male cat ie. one that is incapable of reproducing.
Nictitating Membrane	The third eyelid or haw, which is a thin fold of skin that flicks in the inner angle of the eye diagonally across the eye under the eyelid. Its function is to lubricate the eye and it is often visible when the cat is ill.
Nodosity	A slight deformation or thickening of vertebra at the end of a cat's tail.
Nose Break	Concave profile at the top of the nose.
Nose Leather	The smooth area of skin around the cat's nostrils.

O	
Odd-Eyed	A cat with eyes of different colours i.e., one blue and one copper, yellow, orange, or green eye.
Oligodactyly	A cat having too few toes. Standard is 5 in front and 4 at the back unless stated otherwise.
Open	Classes in which all cats nine months and over may compete, without restriction or qualification regardless of status (ie. Champions, Grand Champions, Great Grand Champions, compete together.)
Oriental Type	A physical characteristic or body type that is long, a triangular head with large ears; almond or oval eyes; long, lean tubular body; long, fine-boned legs; long whippy tail. There is minimal to no depth of flank. As seen in Siamese. Refer also to Svelte.
Outcross	Breeding of two cats together that don't have ancestors in common for a minimum of three generations.
Out of Coat	A term used to describe coat condition, particularly a long-haired cat after moulting or shedding. Shorthaired cat's coats can also be affected during season changes.
Overshot jaw	When the upper jaw (maxilla) extends over the lower jaw (mandible).
	

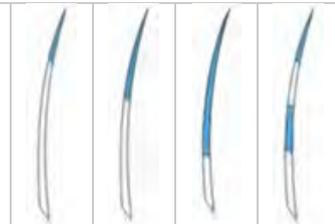
P	
Particolour	<p>This term has two different meanings - which is confusing: In some organizations the tortie colours are called parti-colour. In other organizations the colours with white (bicoloured) are called parti-colour.</p> <p>A particolour patterned cat can be a solid and white, tortie and white, tabby, and white or silver/smoke and white. The pattern of white may vary from unspecified to one of the four recognized patterns of white: mitted, bi-colour or van.</p>
Patching	Clearly defined patches of colour in the coat, as seen in torties, and torties and white.
Peach	<p>Coat colour is pinkish-fawn markings against a warm cream ground colour.</p> <p>This is the Australian Mist term for fawn.</p>
Pencilling	Thin coloured lines on the face in Tabby Pattern.
Pewter	A silver tipped cat with orange eyes. Refer also to Tipped/Tipping.
Piebald Spotting	<p>In some organisations the patching with white colour, caused by gene S, is called Piebald Spotting.</p> <p>Refer also to Bi-Colour and Van.</p> <p>Note: Harlequin is not recognised in ACF Inc.</p>
Phaeomelanin	The Red/Orange colouring pigment. Creates the colour red (or cream when combined with the “dilute” trait). This pigment is also present in the hairs of tabby cats.
Phenotype	The visible characteristics of a cat’s genetic make-up.
Pigment	Colour granules created from eumelanin or phaeomelanin molecules and deposited into skin, hair, eyes, and other tissues.

Pinch	Is a clearly visible indentation at the base of the muzzle to the cheek bones. Indentation in the line of the muzzle below the cheekbones.
Pinking Up	Nipples turn pink if the cat is pregnant about 3 weeks after mating.
Platinum	In some organisations the colour lilac is called this.
Points	All cats with the gene combination $cs\ cs$, $cb\ cb$ or $cb\ cs$ - have points. The extremities of a cat's body: i.e., the mask on the face, the ears, the legs, and the tail are considered the points.
Point Colour	<p>The colour of the points is of a darker shade than the body colour and a clear contrast is seen between the point colour and that of the body. The contrast varies in distinction according to the type of point, i.e., in the Burmese varieties the contrast is so indistinct as to be barely noticeable, whereas in the Siamese it is extremely clearly marked.</p> <p>Colours are: Solid: Seal (the point equivalent for Black), Blue, Chocolate, Lilac, Red, Cream Cinnamon, Fawn, Caramel and Apricot, the Tortie range and Tabby and Tortie Tabbies.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Siamese Point Colour (Himalayan) gene-combination $cs\ cs$; these points can be seen in Siamese, but also in other breeds where it is referred to as Colourpoints. The body is not coloured, it is mostly off-white. Eye Colour is deep blue.</p> </div> <div style="text-align: center;">  <p>Burmese Point Colour (Sepia) gene-combination $cb\ cb$; Burmese are cats with points, but the contrast to the body colour is very weak. Eye Colour is green to gold.</p> </div> <div style="text-align: center;">  <p>Tonkinese Point Colour (Mink) gene-combination $cb\ cs$. The body is coloured with the colour of the points, but the points are clearly visible, because they are darker. Eye Colour is aqua.</p> </div> </div>
Polydactyl	A cat having more toes than the normal of 5 for the front foot and 4 for the back foot.
Polygenes	Genes that act in large numbers to produce modifications of traits e.g., patterns, colours, body size.
Primordial belly pouch	A fatty pad on the lower abdomen, often mentioned in some breed standards.
Prognatism	The protruding of one jaw over the other, either the protrusion of the upper jaw over the lower jaw or vice versa. Refer also to Overshot and Undershot.
Purebred	A cat whose ancestors are of the same breed or are allowable outcrosses.

Q	
Queen	A female cat that is used in a breeding program.
Quick	The thin vein that runs through the cat's claw.

R	
Rangy	Rather long torso with legs of a length to accommodate the body length.
Recessive	A term used for a gene that its phenotype is hidden by a dominant gene. Recessive alleles need to be present on both chromosomes to be able to express the phenotype. By convention the letter representing the gene is in lower case (a, b etc).
Registration	The act of officially recording the personal details of an individual cat or litter with a Cat Control Body by the breeder.
Rex	TBA
Rings/Ringed	Darker coloured bands of hair on legs and tail of tabby cats.
Ringworm	A contagious skin disease caused by a fungus.
Resilient	The fur springs back to its original position after it is stroked backwards.
Roan	A unique coloration in which solid white hairs are thickly interspersed with normal pigmented hairs throughout a cat's coat. The colour in the pigmented hairs defines the description for roan (i.e., black roan, blue roan, red roan, etc.). As seen in Lykoi.
Roman Nose	A profile that displays a downward curve of the nose and low set of the nostrils. As seen in Birman. 
Rosetted 	A variation of the tabby pattern whereby doughnut or floral shapes are formed instead of spots and are outlined in a slightly darker colour of the pattern. As seen in the Bengal.
Ruddy	1) In some organisations Tawny Abyssinians are called Ruddy Abyssinians. 2) A colour of dark ginger-red.

Ruff	Refer to Frill.
Rufous	Refers to a reddening of the coat colour, especially the ground colour in black tabbies. May be a polygene or the result of the action of a group of polygenes. Considered desirable in the Golden. The rufous factor changes the drab beige 'yellow' band of the wild tabby to a brilliant apricot; it changes the drab orange to a brilliant, rich red. The Tawny Abyssinian is a rufoused black ticked tabby.

S					
“S” in Registration Number	Denotes a cat that carries the silver gene. Applicable to registrations and pedigrees.				
Sable	In some organisations used to describe the brown of a Burmese. The colour black = brown is called sable in the Burmese.				
Seal	The colour black in cats with Siamese-points is called seal.				
Sepia	1) The colour pattern, based on the Burmese-gene (cb cb), is called this. 2) The coat colour for the Singapura - dark brown ticking on a warm old ivory ground colour is also called this. (Not related to the Burmese gene).				
Scarab	The beetle shaped outline on the head, occurring in all Tabby breeds.				
Schedule of Breed Codes EMS	Easy Mind System. The list of codes (letters and numbers) that is used to identify breed/colour/pattern/hair length etc. of each cat.				
Self	Refer to Solid.				
Shaded	Denotes a pattern in agouti cats with a high amount of silver or golden (about 2/3 of the entire hair length), 1/3 at the tips of the hairs is coloured. There exist Silver Shaded and Golden Shaded.				
Shell	Denotes a pattern in agouti cats with an extremely high amount of silver or golden (about 7/8 of the entire hair length). Only the hair tips are coloured. There exists Silver shell and Golden shell. Refer also to Chinchilla and Tipped				
Sire	A male parent of a cat (also known as a stud).				
Silver	The Inhibitor-gene I results in the undercoat is being silver-white and that the colour is being restricted to the upper part of the hair shaft of the upper coat. In agouti cats the yellow bands become silver-white.				
 <table border="1" data-bbox="159 1792 494 1848"> <tr> <td>tipped</td> <td>shaded</td> <td>smoke</td> <td>silver tabby</td> </tr> </table>	tipped	shaded	smoke	silver tabby	
tipped	shaded	smoke	silver tabby		
Silver Tabby Point	When the agouti points (tabby point) have a silver-white ground colour.				
Single Coat	One coat, usually the topcoat (guard hairs), without the downy undercoat.				
Smoke	When the hair shaft in non-agouti varieties is 50-80% coloured with the remainder of the hair being silver.				

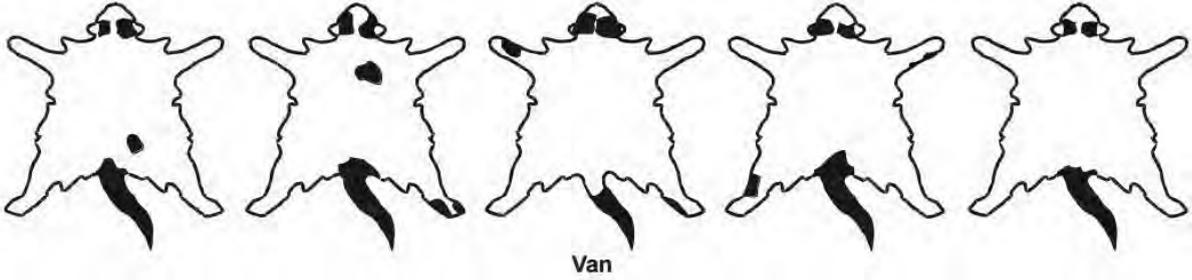
Smoke Point	When the non-agouti points have a silver-white ground colour.
Snipy	A long, sharp, over-narrow nose or muzzle.
Snow	TBA
Solid	<p>A term used to describe a cat with the same-coloured coat from nose to tip of tail. Also known as Self.</p> <p>The ACF (Inc.) standard solid coat colours are:</p> <p>Black Glossy jet black to the roots.</p> <p>White Pure white without markings or shadings of any kind.</p> <p>Blue Light to medium blue grey; no brownish tinge. Produced by dilute gene dd (recessive)</p> <p>Chocolate All shades of warm, chestnut brown. (Chocolate gene identified as bb)</p> <p>Lilac Grey with a distinct pinkish tone. Produced by dilute gene dd together with chocolate gene bb (recessive)</p> <p>Red Strong reddish orange without any markings. Produced by sex-linked gene O.</p> <p>Cream Pure, pastel cream (not a hot colour). The dilute of red. Produced by dilute gene dd (recessive).</p> <p>Cinnamon Bright coppery red. Variation of the chocolate gene identified as b¹ b¹. As seen in Abyssinians.</p> <p>Fawn Pale beige. Produced by dilute gene dd together with cinnamon gene b¹ b¹ (recessive).</p> <p>Caramel Coat that is a specific colour caused genetically (dilute modifier), in blue, lilac, and fawn colours, that causes the colour to have a cold metallic tone. Found only in dilute colours. Dilute modifier gives a warm, brownish cast to lilac and blue.</p> <p>Apricot</p> <ol style="list-style-type: none"> 1) Blue Based: An intense, deep cream verging on pale red, but without the vibrant tone of red. 2) Lilac Based: Muted yet intense, deep cream, lacking a true pastel tone. 3) Fawn Based: As for lilac based, but in a livelier tone.

Sorrel	In some organisations used to describe a cinnamon Abyssinian/Somali.
Spey	A desexed female cat i.e., one that is incapable of reproducing.
Spine Line	The darker shading of the tabby pattern along the spine in tabby varieties.
Spotted Tabby 	A type of tabby patterning showing clearly defined spots of colour. The spots may be round or oval and cover the entire body and the legs. Refer also to Rosettes.
Squint	A 'cross-eyed' look when the eyes of the cat are misaligned. Also called strabismus.
Spectacles	Area of light hair surrounding the eyes. As seen in Tabby varieties.
Spotting	White areas in the coat. Refer also to Piebald Spotting or White Spotting.
Standard of Points	The number (worth) allocated to each part of the cat which added together will total 100. The higher the number the more importance that aspect is in the breed. This along with the detailed description of the breed distinguishing criteria (Breed Standard) is used by judges and breeders to achieve the perfect breed.
Sternum	The breastbone. A long flat bone in the centre of the chest where the rib bones converge.
Stop	A distinct indentation between the forehead and the base of the nose.
Straight	1) Mostly used to indicate straight ears ie., Scottish Straight (Scottish Fold with upright straight ears). But also used for American Curl when the ears are not curled backwards and are straight. 2) The term is also used in breeds with curled hair when the hairs are straight. e.g., Selkirk Rex straight.
Structural Mutation	Appearance of the skeletal and/or cartilage expression different from the average domestic cat such as, but not limited to, folded ears, shortened legs, shortened or absent tail, etc. The difference in expression may or may not affect the physical abilities of the cat.
Stud	An entire male cat used for breeding (sometimes referred to as a 'Tom' cat).
Sturdy	Stocky, solidly built, thick set.
Svelte	Lithe and lean. As seen in Siamese.

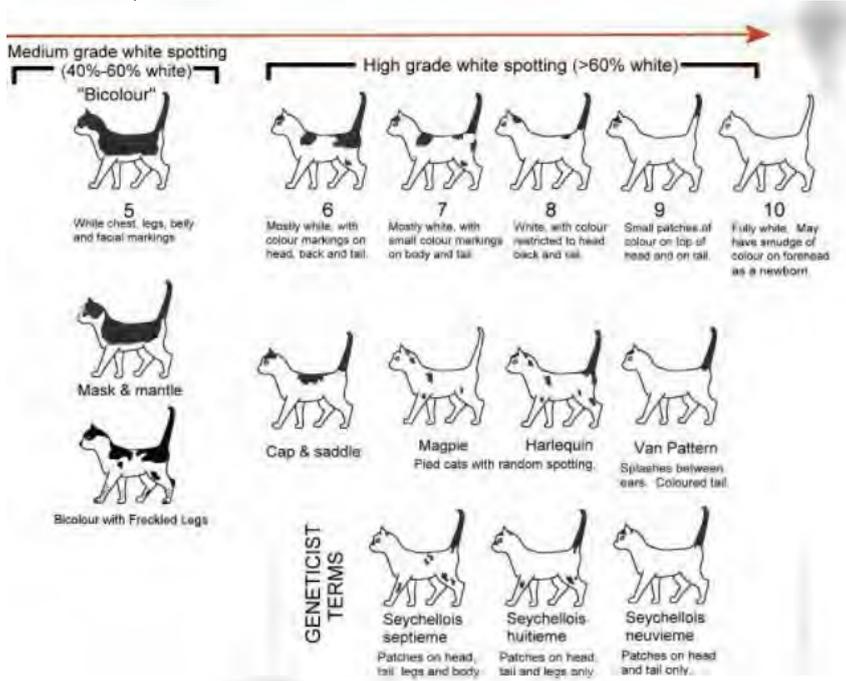
T	
Tabby Pattern	Refers to any of the 5 tabby patterns [Blotched (classic), Mackerel, Spotted, Marbled, and Ticked]. The agouti gene must be present for a full expression of a tabby pattern. Cream/red cats are the exception from the rule, they may display a distinct tabby pattern without having the agouti gene. Colours are: Black (Brown), Blue, Chocolate, Lilac, Red, Cream Cinnamon, Fawn, Caramel and Apricot, and Tortie Tabbies.
Tabby Point Pattern	The points have stripes.
Tail Defects	A deformity of the tail such as kink, knot, greasy lump, any malformation, or formation of a surplus of calcium.
Taper	A gradual decrease in thickness or width of an elongated object. To make or become gradually narrower toward one end. To become gradually smaller.
Tarnishing	Yellow or brown pigmentation in the coat of a silver cat.
Thumbprint	A roundish mark resembling a thumb print in shape, found on the outside of the upper ear in tabbies; the colour of the mark shows the base colour of the cats' coat.
Texture	The consistency of the coat. For example: smooth coat, silky coat, soft coat, firm coat, plush coat, coarse coat.
Ticking/Ticked 	The term used to describe the bands of colour which appear on each individual hair shaft. As seen in Abyssinians.
Tipping/Tipped	The solid, darker colour which appears on the ends of each hair, the main shaft of which is of a lighter colour. The smoke, silver shaded, and silver tipped have tipping. The tipping is approximately 1/8 of the complete hair length.
Torbie	In some organisations used to describe the tortie tabby pattern.
Tortie Tabby	A female tortoiseshell cat that has tabby markings also.
Tortoiseshell (Also called Tortie)	A mixture of two colours (light and dark shades) in female cats i.e., black tortie, blue tortie, chocolate tortie, lilac tortie, cinnamon tortie, fawn tortie and caramel tortie. Sometimes occurs in male cats with extra X chromosomes. The "O" gene is located on the X chromosome.
Tricolour	When the cat's coat contains three distinct colours. As seen in Japanese Bobtails. In some organizations Tricolour is also called Calico and Dilute(d) Calico.

Triple Coat	A triple coat is a normal coat. It consists of guard hairs, awn hairs and down. Guard hairs are the longest with the awn hairs being almost as long. Down is the shortest coat and is usually seen in the undercoat. Refer also to Awn Hairs, Down Hairs, Guard Hairs, Undercoat.
Tubular	Cylindrical, shaped like a tube. Having the same circumference at any point along its length.
Tufts	Extra-long growth of hair between toes, inside ears or on ear tips.
Type	Skeletal and muscular body conformation. Refer also to Conformation.

U	
Unable to be Handled	A cat that is unable to be handled (UTH) due to being vicious or savage and attacks or injures any person who is authorised to handle the cat during a show.
Unable to be Judged	A cat that is unable to be judged (UTJ) due to being nervous or angry and demonstrates its disapproval at being exhibited by noise and a menacing attitude, without attacking or savaging any person.
Undercoat	The down hairs or finest hairs closest to the cat's skin. Refer also to Coat Composition.
Umbilical Hernia	A lump on the belly in the region where the umbilical cord was attached (navel or "belly button") caused by a weakness in the abdominal wall. The hernia may contain tissue from the abdomen, part of an organ (such as the intestine), or fluid.
Undershot 	When the lower jaw (mandible) extends beyond the upper jaw (maxilla). The lower jaw is forward of the upper incisors.

V	
Van Pattern	<p>A predominantly white cat with coloured patches. The patches are usually found on the head and tail, but may also involve the back, legs and feet. Patches of colour on the face is preferably broken by a white blaze. Colour may extend up the rump. The most extreme form of the 'white spotting' gene.</p> <p>Refer also to Piebald Spotting or White Spotting.</p>
 <p style="text-align: center;">Van</p>	
Velour	<p>A term used in some organisations to describe a Flock Coat. As seen in the Peterbald.</p>
Vertical Crimp	<p>Beginning at the base of the ear and continuing along some or all of its height, the outer edge of the ear bends or rolls vertically in toward the centre of the ear giving the outer edge of the ear a pinched or crimped aspect. A fault associated with American Curl ears.</p>
Vibrissae	<p>Tactile hairs or whiskers.</p> <p>Vibrissae can be found above the eyebrows, as whiskers and on the backside of the front legs.</p>
Vitiligo	<p>Depigmented skin. Is a rare condition in which the skin loses its pigment cells (melanocytes). This can result in white patches in the skin and hair.</p>

W	
Warm Coat	<p>Coat exhibiting fawn, brown or cream tinges.</p>
Weak Chin	<p>When the chin is not in line with the end of the nose – receding.</p>
	

<p>Wedge</p> 	<p>Used to describe the head shape and profile required in some breeds. An isosceles triangular head shape. Where the width is less than the length of the head. (As viewed from the top of front) is created by straight lines from outer ear bases along sides of muzzle, without a break in the jaw line at the whiskers. Skull to be flat and the straight nose a continuation of the forehead.</p>
<p>Whip/Whippy Tail</p>	<p>A type of long, tapering and slender, flexible tail required in some breeds. As seen in Siamese and Orientals.</p>
<p>Whiskers</p>	<p>The long bristles protruding from the cat's whisker pads.</p>
<p>Whisker Break</p>	<p>Change of direction between the muzzle and the cheekbones.</p>
<p>Whisker Pad</p>	<p>The fleshy part of the upper lip on either side of the nose.</p>
<p>White-Spotting Gene</p>	<p>The white patches, caused by the Piebald Spotting gene, are called white spotting. Refer also to Bicolour, Tricolour, Piebald.</p>  <p>The diagram illustrates white spotting patterns in cats, categorized into Medium grade (40%-60% white) and High grade (>60% white). It includes terms like Bicolour, Mask & mantle, Cap & saddle, Magpie, Harlequin, Van Pattern, and genetic terms like Seychellois septieme, huitieme, and neuvieme.</p>
<p>Whorl</p>	<p>Roundel or rosette on flanks, and sometimes cheeks, of Classic Tabby.</p>
<p>Withhold Challenge</p>	<p>A Judge may withhold the challenge certificate to an adult cat, when in their opinion, it displays a condition under the General Remarks for Faults Precluding a Certificate or as listed in the standard for that breed.</p>
<p>Wry Mouth</p>	<p>Crooked jaw formation.</p>
<p>X</p>	
<p>Xiphisternum</p>	<p>The lowest and smallest of the three divisions of the breastbone, so called because it is shaped like a sword.</p>

Y	

Z	

Acknowledgements:

Information found in various documents issued by:

Federation Internationale Feline (FIFe),

World Cat Federation (WCF),

The International Cat Association (TICA),

Cat Fanciers Association (CFA),

Southern African Cat Council (SACC),

New Zealand Cat Fancy (NZCF),

A Standard Guide to Cat Breeds – Macmillan London Ltd, 1979

Basic Feline Genetics

NOTE: This information is not meant to be a comprehensive manual on cat genetics. Information contained here is generally true but as always there are exceptions to the rule. You are encouraged to also read books on the subjects.

Definitions as applicable in this section:

“colour” just means colour. (i.e., Black, blue, chocolate, Lilac, red, cream etc.).

“pattern” just means pattern. (i.e., Tabby, smoke, shaded, tipped etc.).

“colour/pattern” means both.

1. Male kittens always obtain both colour genes from the dam. The male offspring in a litter will always be either the colour of the dam (or one of the colours in the case of particolour) or the dilute form of the dam’s colour(s). Also refer to items 21 & 24 below.
2. Female kittens take one colour gene from each parent. The colour of female kittens in a litter will always be either a combination of the sire’s and dam’s colours, or the dilute form of those colours. Also refer to items 21 & 24 below.
3. To obtain any of the red or cream colour/patterns in female kittens, the sire must be one of the red or cream colour/patterns PLUS the dam must in some form demonstrate red or cream. Refer item 21 below.
4. Only the immediate parents determine the colour/pattern of a kitten. The colour/patterns found in the pedigree of a kitten will not always directly affect the colour of the kitten. One notable exception is the colourpoint gene, which can carry through several generations. Refer items 21 & 24.
5. A kitten’s pattern can be inherited from either parent.
6. A dominant characteristic (all dominant colours and patterns such as shaded, smoke, white tabby, bicour etc) cannot skip a generation. The characteristic cannot be transferred from one generation to the next without showing that characteristic in each generation.
7. A cat displaying a dominant colour (black, red, tortie etc) must have a parent which displays a dominant colour. Refer item 21.
8. Two recessive colour parents (blue, cream etc) can’t produce an offspring of a dominant colour (black, red etc.)
9. Two colourpoint parents can’t produce a non-colourpoint offspring.
10. To get a colourpoint kitten, both parents must be carrying the colourpoint gene (even if they do not appear colourpoint themselves.).
11. The mating of a colourpoint cat and a cat with no colourpoint in the background will produce no colourpoint offspring.
12. A (non-silver) tabby must have at least one parent that is either a shaded or a tabby. A silver tabby must have at least one silver tabby, shaded or smoke parent. Refer to item 13 below.
13. All red cats will have some tabby markings. Whether or not a red can produce as a tabby will depend on whether it is a true tabby with a tabby or shaded parent or whether it is a red with ghost tabby markings and neither a tabby nor a shaded parent. A red tabby that is not a true tabby cannot produce a tabby offspring of another colour without being bred to a true tabby or a shaded.
14. A cat with a white undercoat (smoke or shaded) must have a parent that has a white undercoat. Refer item 21 below.
15. A shaded cat must have at least one parent that is a shaded. Refer item 21.
16. A shaded parent can produce a smoke offspring, but a non-shaded (smoke) parent can’t produce a shaded offspring unless bred to a shaded. Refer item 21 below.
17. A bi-colour must have a bi-colour parent. Refer item 21 below.

18. Particolour cats (blue-cream tortie, and calico) are almost always female, but males can and do occur occasionally (and are not always sterile).
19. A white cat must have a white parent.
20. A white cat breed as both a white (which you see) and a masked colour (which you don't see) and can produce based on both white and the unseen colour/pattern. The masked colour/pattern must be determined, based on the white's pedigree and the offspring produced in a controlled breeding, to effectively predict the colour/pattern of the expected offspring. Interestingly, white kittens may have a small spot of colour that the cat will breed as when an adult. The spot of colour may be visible for several months, but often disappears as the kitten matures.
21. Genetics for solid white cats can affect the possible colour/pattern of expected kittens in that the white parent may be masking the colour/pattern needed to produce this result.
22. Two longhair parents can't produce a shorthair kitten.
23. Two classic tabby parents can't produce a mackerel, spotted, or ticked tabby kitten. A ticked tabby must have a ticked tabby parent. A mackerel or spotted tabby must have a mackerel, spotted or ticked parent. Refer item 21 above.
24. The dilute gene must be present in both the sire and dam's pedigree to produce a dilute offspring.
25. The chocolate or lilac gene must be present in both the sire and dam's pedigree to produce chocolate or lilac offspring.

Further information can be found in:

"Feline Genetics" in *Feline Domesticus – Manual of Feline Health 1983-1983*, Cornell University, Judith Kinnear, PhD., p121

"The Genes of Cats" in *the Book of the Cat*, Summit books, New York. 1080

"Robinsons Genetics for Cat Breeder & Veterinarians", 4th Edition, Butterworth Heinemann, Boston 1999.

"Feline Genetics": in *A Standard Guide to Cat Breeds*, McGraw Hill. New York, 1979.