



THE AUSTRALIAN CAT FEDERATION (Inc.)

ACF GLOSSARY OF TERMS

PREFACE

The need for a guide to explain terminology relevant to ACF has been considered for some time. Although the book of Standards is used to describe the ideal characteristics of the different breeds, it has become apparent that clarification of some of the terminology used is necessary.

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 have been included.

This document is separate to the Book of Standards and is designed to be used in conjunction with it to give a holistic approach to presenting the information required to adequately cover all aspects of the terminology used in the ACF. So, rather than having multiple glossaries, a single Glossary of all terms, divided into four parts is considered best to cover the requirements for a wider audience, who might be new or existing judges; new exhibitors or those wanting to refresh their knowledge; registrars both new and current, as well as any interested reader wanting to understand more about terminology as it relates to cats and their breeding, along with the show world.

Only the standard solid colour descriptions recognised by ACF (Inc.) have been listed, with the other patterns 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 commonly recognised foods as reference.

PART 1:	GENERAL SHOW TERMINOLOGY
PART 2:	STRUCTURE
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PART 4:	BASIC GENETICS AND GENETIC TERMINOLOGY

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PART 1:

General show terminology

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 2023 GM be accepted.
Adult	A cat, entire or desexed, over the age of 9 months.
Any Other Colour (AOC)	A non-recognised colour or pattern in ACF (Inc.) in a certain breed of cat.
Any Other Variety (AOV)	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.

B	
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.
Breed	Cats sharing common ancestor and similar physical characteristics.
Breed Standard	A detailed description of a breed of pedigree or companion cat providing a means of distinguishing criteria used by judges and breeders to achieve the perfect breed. Refer also to Standard of Points.

C	
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.
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.

Companion Pet	<p>A kitten or cat not conforming to any recognised pedigree breed (Domestic).</p> <p>A kitten or cat having one recognised pedigree parent (Part Pedigree).</p> <p>A kitten or cat from a 1st generation Breed Development Program that has been deemed “pet only” by the breeder (Hybrid).</p> <p>A kitten or cat conforming to a recognised pedigree breed that has been deemed “pet only” by the breeder (Household Pet).</p> <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>
Conformation	The form of a cat made up of the size and shape of a breed. Also called type.
Condition	Referring to the state of well-being of the cat, i.e., general health, fitness, proper weight, muscle tone, and grooming are all considerations.
Corin	<p>A gene for widening the agouti-derived phaeomelanin (yellow) band in cats.</p> <p>For fuller description see in Genetic section.</p>

D	
Declawing/Declawed	The surgical removal of the cats’ claws. Evidence of this on a cat is a Disqualification fault.
Dam	A female parent of a cat (also known as a queen).
Disqualify	<p>To remove from competition.</p> <p>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.</p>
Desexed	<p>A cat, male or female, that has had its reproductive capability removed.</p> <p>Refer also to Neuter and Spey.</p>
Domestic	<p>A non-pedigree cat.</p> <p>Refer also to Companion Pet.</p>

E	
Entire	A cat, male or female, that has not been desexed.
Exhibit	The term referring to an individual or group of individuals cat/kitten entire or desexed at a show.

F	
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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.
Feral Cat	A large wild cat living in the Australian Bush. Not to be confused with urban strays also known colloquially as “ferals”.

G	
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H	
Household Pet	Refer to Companion Pet.

I	
J	

K	
Kitten	A juvenile cat, entire or desexed, under 9 months of age.

L	
Litter	1) The offspring born from a single mating. 2) The product used in a cat’s toilet tray.
Long Hair	Term used to describe the length of coat of breeds such as Persian or Ragdolls. The Long Hair gene is recessive, and has at least four mutations

M	
Moggie	A colloquial name for a domestic cat.
Medium or Semi Long Hair	Term used to describe the intermediate range of length of coat of breeds such as Balinese, Birman or Somali. Note that this term can also be used along side of terms such as ‘semi long’ in some Breed Standards

N	
Neuter	A desexed male cat i.e. one that is incapable of reproducing.

O	
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.)

P	
Pinking Up	Nipples turn pink if the cat is pregnant usually about 3 weeks after mating.

Q	
Queen	A female cat that is used in a breeding program.

R	
Registration	The act of officially recording the personal details of an individual cat or litter with a Cat Control Body by the breeder.

S	
“S” in Registration Number	Denotes a cat that has ancestors in its pedigree that were registered as silver. Applicable to registrations and pedigrees.
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.
Short Hair	Term to describe the length of coat of breeds such as Siamese, Burmese and other short-coated breeds. Other breeds such as British Shorthair and Exotic are also considered to be Shorthair as their coats do not “flow” in a similar fashion to the coats on Longhair and Semi Longhair breeds.
Sire	A male parent of a cat (also known as a stud).
Spey	A desexed female cat i.e., one that is incapable of reproducing.
Stud	An entire male cat used for breeding (sometimes referred to as a 'tom' cat).

T	
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.

V	
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W	
Withhold Challenge	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.

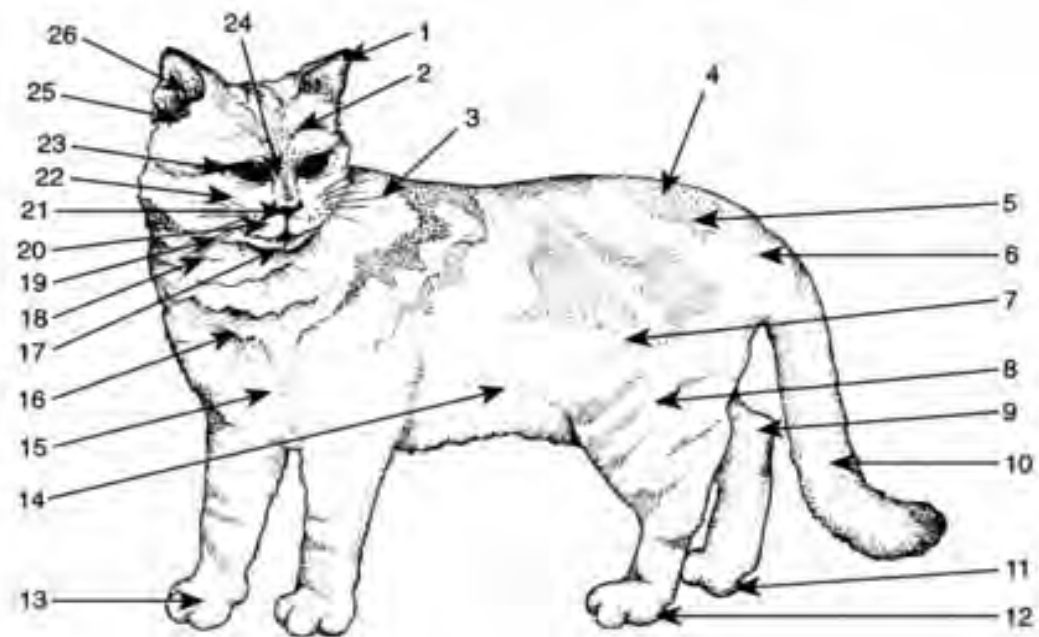
X	
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Y	
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z	
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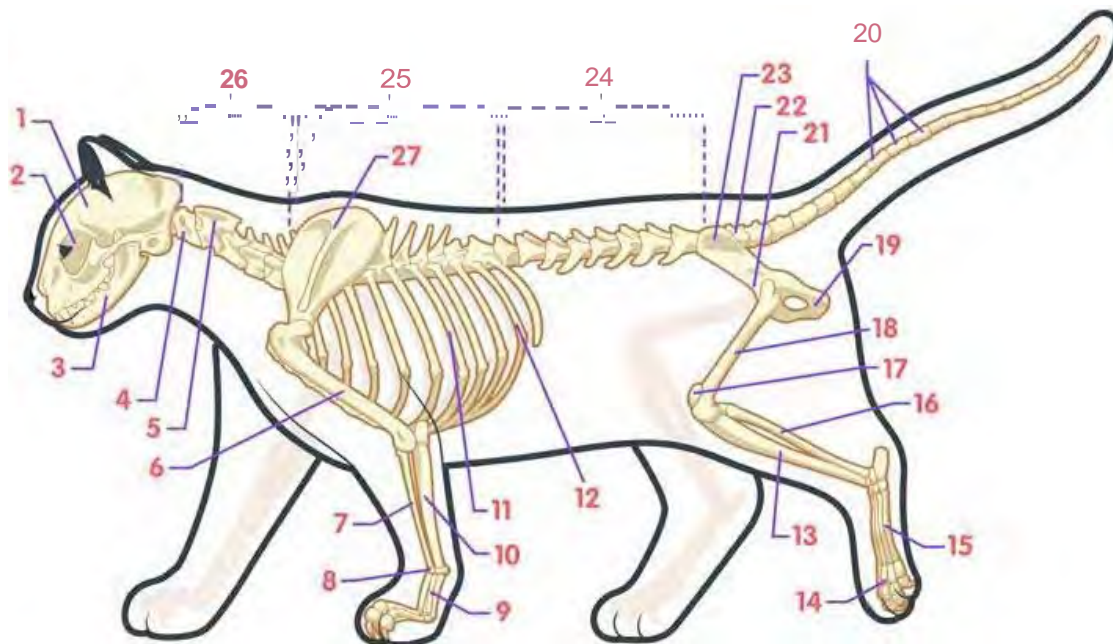
Structure

Parts of the Cat



1. Ear (tufts on tips)	14. Midsection
2. Forehead	15. Chest
3. Shoulder Blade	16. Shoulders
4. Back	17. Chin
5. Rump	18. Whisker Break
6. Base of Tail	19. Whiskers
7. Flank	20. Whisker Pad
8. Thigh	21. Nose Leather
9. Hock	22. Cheeks
10. Tail	23. Eyes
11. Back Foot	24. Nose Break/Stop
12. Paw Pads	25. Ear Leather
13. Front Foot	26. Ear Tufts/Furnishings

Bones of the cat

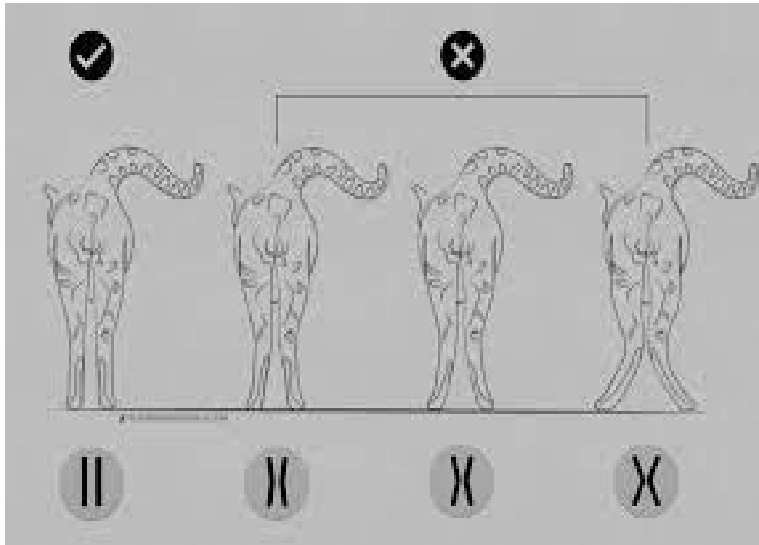


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|-------------|--------------------------|----------------------|------------------------|
| 1. Skull | 8. Carpals | 15. Metatarsals | 22. Sacrum |
| 2. Orbit | 9. Metacarpals | 16. Fibula | 23. Ilium |
| 3. Mandible | 10. Ulna | 17. Patella | 24. 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 | |












Terminology

A	
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.
Autosomal	Independent of sex. That is one of the numbered chromosomes as opposed to the sex chromosome. Cats have 38 chromosomes: 18 autosomal pairs and the X and Y sex chromosomes. This term is used in genetics, when speaking of autosomal inheritance, i.e., sire and queen may inherit a trait.
Awn Hairs	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. Refer also to Guard Hairs, and Down Hairs and Coat Composition.

B	
Balance	Describes the harmonious physical proportions of a cat' body.
Bobtail	A cat whose tail is shortened and may have curves and/or kinks. End looks like a pompom. As seen in the Japanese Bobtail/Pixiebob.
Break	A very strong indentation of the nose between the forehead and the base of the nose (which compared to a stop is not rounded).
Breeches/Britches	The longer and thicker hair on the back of the upper hind legs.
Brush	Bushy featherings or plume-like tail of some longhaired breeds.

C	
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.
Coat Composition	There are three main types of hair that make up the normal coat: 1) guard hairs, 2) bristle or awn hairs, and 3) down or woolly hairs. Refer also to Guard hairs, Awn hairs and Down Hairs.
Cobby	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.
Compact	Closely or neatly packed together; opposite of rangy.
Concave	Curve shaped like the inside arc of a circle.
Conformation	The form of a cat made up of the size and shape of a breed. Also called type.
Contrast	The visibly noticeable difference in colour between two coat colours on a cat.
Convex	Curve shaped like the outside arc of a circle. Opposite of concave.
Cow Hocking	Condition in which a cat has back legs which are not parallel, the hocks bend towards the centre causing the feet to turn outwards. Considered a serious fault. 
CPC	Denotes a colourpoint carrier. Applicable to registration and pedigrees.
Crisp	Firm densely packed 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	
Declawing/Declawed	The surgical removal of the cats' claws. Cats that have been declawed to be disqualified as per ACF General Rules for Disqualification.
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.
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 top coat 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.	
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.	
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.	
<div><p>Round</p></div>	<div><p>Oval</p><p>Elliptical eye shape. Reducing in size at ends.</p></div>	<div><p>Almond</p></div>
<div><p>Walnut</p><p>Having a rounded shape of a walnut; a slightly flattened circle; not quite an oval.</p></div>	<div><p>Hooded</p></div>	<div><p>Lemon</p><p>A rounded lemon eye shape</p></div>

F	
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 can be fatal, but current (new) treatment protocols show very promising results that it can be treated successfully.
Feral Cat	A large wild cat (<i>Felis cattus</i>) living in the Australian Bush. Not to be confused with urban strays also known colloquially as "ferals".
Flank	The part between the ribs and thigh at either side of the body.
Flared	Spread outwards.
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.
Fungus	A primitive form of plant life that can be parasitic. Refer also to Ringworm.

G	
Gene Pool	Total of all the genes, dominant and recessive, that exist in a certain breed of cat.
Genes	Basic unit of heredity, the individual hereditary units that control growth, development, and the physical characteristics of a cat. They are found on specific locations on a chromosome.
Genotype	The hereditary characteristics of an individual cat, whether it can be seen or not.
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 wave losing its tight curl. Semi long hair loosely curled at varying lengths, rather than all one length. As seen in LaPerms.



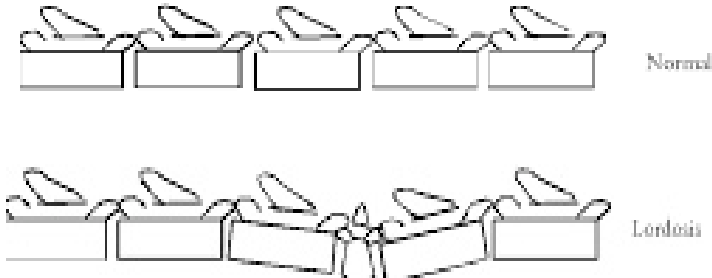
H	
Hard in texture	A coat texture that is dense and firm to the touch. As seen in American Shorthairs.
Hairlessness	Relative absence of noticeable coat. Hairlessness is not usually absolute in the cat. In the Sphynx there maybe hair on the points and the body is often covered with a down similar to suede.
Haw	Refer to Nictitating Membrane.
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.
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.
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	A heritable factor that causes the base of each hair to be unpigmented, resulting in silver or smoke coloration. The genetic basis is not yet published.
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J	
Jowls/stud jowls/stud cheeks/shields	The thickening of the skin over the cheeks in entire male cats.

K	
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.
Knickerbockers	Refer to Breeches.

L	
Lethal Factor	<p>An allele is said to be lethal if homozygous kittens die as foetus (in utero) or shortly after they are born.</p> <p>Example: Gene M, homozygous Manx/Cymric would die before their birth, therefore Manx and Cymric are always heterozygous for the gene M.</p>
Level Bite 	<p>The upper and lower teeth line up.</p> 
Lift/Loft	<p>A short coat that is soft and woolly and stands up away from the body.</p>
Line Breeding	<p>Mating related cats that have a common ancestor appearing at least one time in the first three generations of both parent's pedigree.</p>
Long and Substantial	<p>Denoting the type of some breeds, use to indicate longer length of body that is not accompanied by foreign type.</p>
Longie	<p>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).</p>
Lordosis	<p>Curvature of spine downwards. Also termed saddleback</p> 
Luxating patella	<p>Genetically transmitted problem that causes the kneecap to slip sideways when the joint is moved. Can cause lameness.</p>
Luxurious Coat	<p>Sensual pleasure to feel. As seen in Bengals/Toygers.</p>
Lynx Tufts	<p>Extra-long growth of hair on ear tips.</p>

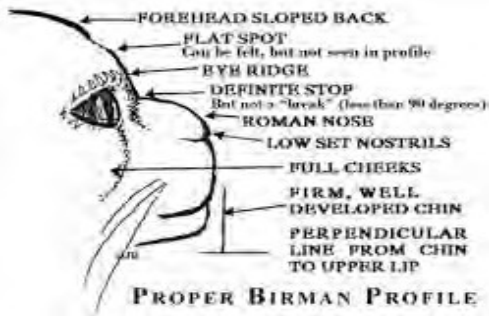
M	
Marcel Wave	A term used in some organisations to describe the uniform ripple-like wave in some Cornish Rex coats.
Masking	Also known as epistasis. The presence of some genes is so overriding that they are able to conceal the presence of genes at other loci. Masking is not the same as dominance.
Massive	Large, substantial, and proportionately heavy.
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.
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.
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 DevonRex.
Mutation	A change in genotype having no relation to the animals' ancestry. e.g: Gene hr in the Sphynx causes 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.
Muzzle Break	A change of direction between the muzzle and the cheekbones of a cat. See Pinch

N	
Nanism	<p>The condition of being abnormally or exceptionally small in stature.</p> <p>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.</p> <p>Disproportionate Dwarfism – Munchkin fit this category.</p> <p>Where the body is normal size, but the limbs are short.</p> <p>Proportionate Dwarfism – Singapura could fit this category.</p> <p>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.</p> <p>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.</p>
Nasal Aperture	The size of the nostril opening. Too small, restricted, or pinched. Is considered a serious fault.
Natural Breed	A breed of cat that developed without the assistance of humans or selective breeding. e.g. Siamese, Abyssinian, Turkish Van, Russian Blue, Maine Coon, Siberian, Manx etc.
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 furless skin surface surrounding the external openings of 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.
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).
Oligodactyly	A cat having too few toes. Standard is 5 in front and 4 at the back unless stated otherwise.

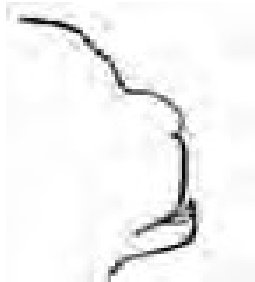
P	
Phenotype	The visible characteristics of a cat's genetic make-up.
Pinch	Is a clearly visible indentation at the base of the muzzle to the cheekbones. Indentation in the line of the muzzle below the cheekbones.
Polydactyl	A cat having more toes than the normal of 5 for the front foot and 4 for the 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	
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.).
Ringworm	A contagious skin disease caused by a fungus.
Resilient	The fur springs back to its original position after it is stroked backwards.
Roman Nose	A profile that displays a downward curve of the nose and low set of the nostrils. As seen in Birman. 
Ruff	Refer to Frill.

S	
Saddleback	A dip in the middle of the back. See Lordosis
Single Coat	One coat, usually the topcoat (guard hairs), without the downy undercoat.
Snipy	A long, sharp, over-narrow nose or muzzle.
Squint	A 'cross-eyed' look when the eyes of the cat are misaligned. Also called strabismus.
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 i.e., 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.
Sturdy	Stocky, solidly built, thick set.
Svelte	Lithe and lean. As seen in Siamese.

T	
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.
Texture	The consistency of the coat. For example: smooth coat, silky coat, soft coat, firm coat, plush coat, coarse coat.
Third Eyelid	Refer Nictitating Membrane.
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	
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	
Velour	A term used in some organisations to describe a Flock Coat. As seen in the Peterbald.
Vertical Crimp	Beginning at the base of the ear and continuing along some or all 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.
Vibrissae	Tactile hairs or whiskers. Vibrissae can be found above the eyebrows, as whiskers and on the backside of the front legs.

W	
Weak Chin 	When the chin is not in line with the end of the nose – a receding chin.
Wedge 	Used to describe the head shape and profile required in some breeds. An equilateral triangular outline of the head and ears when viewed from the front. 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-base along sides of muzzle, without a break in the jaw line at the whiskers. As for the Siamese/Oriental breeds.
Whip/Whippy Tail	A type of long, tapering and slender, flexible tail required in some breeds. As seen in Siamese and Orientals.
Whiskers	The long bristles protruding from the cat's whisker pads.
Whisker Break	Change of direction between the muzzle and the cheekbones: an indentation in the outer line between muzzle and cheekbone as viewed from the front.
Whisker Pad	The fleshy part of the upper lip on either side of the nose around the whisker area.
Whorl	Roundel or rosette on flanks, and sometimes cheeks, of Classic Tabby.
Wry Mouth	Crooked jaw formation.


X	
Xiphisternum	The small piece of cartilage which is attached to the lower end of the sternum. So called because it is shaped like a sword.

Y	
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Z	
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Part 3:


Colour and Patterns


A	
<p>Agouti</p> 	<ol style="list-style-type: none"> 1. 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. 2. A dominant gene designated A.
<p>Agouti Signaling Protein (ASIP)</p>	<p>A <u>protein</u> that is encoded by the ASIP <u>gene</u>. It is responsible for the distribution of <u>melanin</u> pigment in mammals. Agouti interacts with the <u>melanocortin 1 receptor</u> to determine whether the <u>melanocyte</u> (pigment cell) produces <u>phaeomelanin</u> (a red to yellow pigment), or <u>eumelanin</u> (a brown to black pigment). This interaction is responsible for making distinct light and dark bands in the hairs of animals such as the <u>agouti</u>, for which the gene is named.</p>
<p>Albino/Albinism</p>	<p>Lack of pigmentation caused by the lack of functional tyrosinase enzyme, resulting in a coloration of white with pale blue eyes.</p>
<p>Amber /Light Amber</p>	<p>Amber is a "late colour change" gene ONLY found in the Norwegian Forest Cat at present. It is due to the recessive form of the extension gene e/e found in that breed.</p> <p>Coat colour is:</p> <p>Amber - Apricot-to cinnamon</p> <p>Light Amber - Pinkish-beige to fawn-like colour.</p> <p>Note: The extension gene is only active with Melanin and not Pheomelanin.</p> <p>Therefore, only black/brown coats will show the colour change to Amber and blue/lilac (Dilute) coats to Light Amber. Red/cream coats are unaffected.</p> <p>Note:</p> <ul style="list-style-type: none"> • This is age dependent colour maturation; all kittens are initially black tabby or blue tabby. As the kittens mature, the black/blue stripes gradually turn to yellow and golden coloration. The black becomes amber and the blue light amber. • The original black or blue coat colour remains primarily on the tail tip in adults.
<p>Amelanistic</p>	<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>

Apricot	<p>1) Blue Based: An intense, deep cream verging on pale red, but without the vibrant tone of red.</p> <p>2) Lilac Based: Muted yet intense, deep cream, lacking a true pastel tone.</p> <p>3) Fawn Based: As for lilac based, but in a livelier tone.</p>
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B	
Bars/Barring	Lines or stripes (tabby striped markings) particularly on the legs and tail.
Belly Spot/s	<p>1) Distinct circles of colour on the belly area. Associated generally with tabby patterns. Such spotting is required for some tabby patterns.</p> <p>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.</p>
Bicolour 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 colour on the 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 all or some white toes.</p>
	
Black	<p>1. Glossy jet black to the roots.</p> <p>2. The dominant gene for the melanin black colour designated as B.</p>
Blaze	<p>A distinctive contrasting marking down a cat's face from forehead to nose.</p> <p>a. A white patch between the eyes of even dimension on the nose/or between the eyes or even starting at the forehead and mostly extending down and beside the nose. Usually in the shape of an inverted V.</p> <p>b. In tortoiseshell cats, a blaze is a vertical division of the two base colours running down the middle of the face.</p> <p>Known as a Flamme in some organisations.</p>
Blotched	Refer to Classic Tabby.
Blue	<p>1. Light to medium blue grey; no brownish tinge.</p> <p>2. Produced by dilute gene dd (recessive) together with the black gene B.</p>
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>Brick Red</p>	<p>Used to describe the nose leather colour in certain colours and patterns. Warm reddish brown similar to that of red clay bricks.</p>
<p>Brindling/Brindled</p>	<ol style="list-style-type: none"> 1. The overall 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. 2. Tortie with intermingling of both coat colours e.g. red and black.
<p>Bronze</p>	<p>Coat colour that is a rich warm rufous ground colour ticked with black spotting and ticking. As seen in Egyptian Maus.</p>
<p>Brown</p>	<ol style="list-style-type: none"> 1. Outdated term for Chocolate. Burmese "Brown" and Siamese "Seal" are equivalent to black. 2. Brown was also a misnomer for genetically black tabbies with extensive rufousing so that they appeared brown to the eye. 3. Gene recessive to the Black gene lightening the coat to a brown colour and designated as b.
<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 set within ground colour or darker colouring, then 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/Vest Buttons</p>	<p>Spots on the stomach and/or chest, often dark on a light background</p>

C	
Calico	Tortoiseshell (tortie) & white (American term) <i>Also called Tricolour.</i>
Cameo	A former description for red and cream silver shaded and shell (tipped) patterns in ACF (Inc.) It is still used in some organisations.
Caramel	Coat that is a specific colour caused genetically (dilute modifier), in blue, lilac, and fawn colours, that gives the colour a warm, brownish cast to lilac and blue. Found only in dilute colours. In tabby patterns the dilute modifier (Dm) causes a hard metallic sheen in patterned areas, particularly in the extremities. A genetic test for Dm is yet to be developed.
Champagne	This term is used for the colour chocolate in some organisations and with specific breeds. See also Chestnut.
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 solid, warm brown. Also refers to the colour chocolate in some organisations and specific breeds. See also Champagne.
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 pattern is sometimes found in Persians/Exotics and British Shorthair. Refer also to Shell and Tipped.
Chocolate	1. Coat colour ranging from milk chocolate to a warm brown. 2. Chocolate colour is due to the Brown gene recessive to the dominant Black gene B and is identified as b.
Cinnamon	1. Bright coppery red. As seen in Abyssinians. 2. An allele of the Black gene, recessive to the Brown (chocolate) allele and identified as b ^{b^l}

Classic Tabby 	A form of tabby patterning showing large patches of solid colour (also referred to as “blotched” tabby).
Cream	<ol style="list-style-type: none"> 1. Pure, pastel cream (not a hot colour). 2. The dilute of red. Produced by dilute gene dd (recessive).
Cold Tone	Coat colour exhibiting a lack of warm toning.
Colourpoint	<ol style="list-style-type: none"> 1. A cat with colour only at the extremities (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 blue eyes. Refer also to Point Colour. 2. Genetically $c^s c^s$
Corin	A gene for widening the agouti-derived pheomelanin (yellow) band in cats. For fuller description see in Genetic section

D	
Dense	<ol style="list-style-type: none"> 1. Dominant gene for normal intense colour of the hair 2. Gene designated D
Dilute	Referring to a lighter coat colour variation of a cat's primary colour due to uneven deposition of pigment granules in the hair. A recessive colour. i.e., Black becomes blue, chocolate becomes lilac, Cinnamon becomes fawn, and Red becomes cream. Gene designation d.

E	
Easy Mind System	A system used by FIFe to replace colour and breed names with a simple alphanumerical format. It is not genetically based, nor does language create any barriers. The 1st part of the EMS code is written in uppercase and denotes breeds (e.g. BUR = Burmese). The 2nd part denotes a recognised colour and uses letters in lower case (e.g. “b” is chocolate). The 3rd part denotes patterns via a numerical code (e.g. 23 = mackerel tabby). The 4th part is used for eye colour specification and uses numerical values. (eye colour is left out for some breeds such as Burmese, Siamese etc.). The 5th part is used for a few breed-specific codes and is also numerical (e.g. 51 = rumpy Manx). Thus a Chocolate Silver tabby point Devon Rex would be DRX bs 21 33.
Ebony	See Black
EMS	See Easy Mind system
Eumelanin	Is the form of Melanin that produces the brown shades that are visually black, chocolate, or cinnamon. Creates the colours blue, lilac, or fawn when combined with the “dilute” gene

F	
Fawn	<ol style="list-style-type: none"> 1. Pale beige. 2. Produced by dilute gene dd together with cinnamon gene $b^l b^l$ (recessive).
Flame Point	In some organisations this term is used for red points.
Freckles	<p>Small patches of dark pigmentation seen in red and cream cats with clearly defined edges. Can appear on the cat’s mouth, nose, inside of the ears, and on the edges of their eyelids.</p> <p>They cause the cat no harm.</p> <p>The technical term is lentigo simplex and is genetic</p>
Frost Point	In some organisations refer to the point colour lilac by this term.

G	
Gauntlets	The white markings on the back side of the hind legs ideally ending in a point. As seen in Birmans.
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	<ol style="list-style-type: none"> 1. The natural deep glow, shine or sparkle created by a clear layer or bubbles within the hair shaft which reflects light readily. May be seen in some Bengals and Toygers. 2. Due to a recessive gene designated gl.
Gloves	<ol style="list-style-type: none"> 1. Front paws have white gloves, preferably ending in an even line across the paws at the third joint (where toes meet paws). 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. 2. An autosomal recessive gene w^g specific to Birmans.
Ground Colour	<p>Is the basic colour of the coat, on which the pattern is overlaid.</p> <ol style="list-style-type: none"> 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	<p>Coat colour is rich warm cream ground colour with “old gold” markings.</p> <p>Australian Mist only: cinnamon</p>
Golden	<p>The coat pattern of a cat that has a golden agouti banding with coloured hair (black, blue, chocolate etc.) on the outer portion of the hair.</p> <ol style="list-style-type: none"> 1. Tipped Golden, refer to a cat with wide bands that make much of the coat golden or apricot in tone with only the very tips of the hair showing the base colour. 2. Shaded Golden refer to a cat with wide bands that make a large portion of the coat golden or apricot with the base colouration starting approximately halfway down the hair shaft and extending to the tip. 3. Genetically they are non-silver agouti cats with modified agouti wide-banding (Wb).



H	
Harlequin	Is a pattern attributable to the S gene (Piebald Spotting) and where the amount of white is %. There are coloured patches (3-5 patches) on the head and body. The belly is white and may have patches of colour. Not a recognised ACF Inc. pattern. Refer also to Piebald Spotting.
Havana/Havana Brown	1) A Chocolate Oriental SH/LH is called Havana in some organisations. 2) In some organizations the Havana Brown is a distinct breed, whose standard differs somewhat from that of the Oriental.
Hazel	Light brown, flecked with yellow or green, refers to eye colour.
Himalayan Pattern	Refer to Colourpoint or Point Colour.
Hot Cream	The colour cream is said to be 'hot' if it is too reddish in tone.


I	
Intermingled	Coat of two colours evenly mixed, i.e., as in tortoiseshell cats

J	

K	
Karpati Pattern	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. Only recognised in La Perm at this point.































L	
Lavender	In some organisations, this term refers to Lilac.
Light brown	1. Gene recessive to the brown gene, the coat being a lighter reddish brown. Gene designation b ^l 2. Old term for Cinnamon colour
Lilac	1. Grey with a distinct pinkish tone. 2. Produced by dilute gene dd together with chocolate gene bb (recessive)
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 caused by the Piebald Spotting gene "S. Caused by recessive white spotting gene
Lynx Point	A term for the tabby pointed (Siamese) pattern in some organisations. Refer to Tabby Point.




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.
Mask	A darker (contrasting to the body colour) area on the face including the nose, whisker pads, chin and around the eyes connected to the ears by tracings of point colour. As seen in Siamese
Marmalade	See Orange
Melanin	<p>The term for a group of pigments in the body giving colour to skin and hair. Produced in pigment cells (melanocytes).</p> <p>There are two types of melanin in mammals,</p> <ul style="list-style-type: none"> • Eumelanin – the black pigment. Genetic mutations of eumelanin lighten the pigment to Brown and Light Brown. • Pheomelanin – the reddish yellow pigment.
Melanocyte	A pigment producing cell.
Mi-Ke	Is the name given to Japanese Bobtails with the traditional pattern of tortie with white (tri-colour).
Mink Pattern	Relates to Burmese/Siamese intermediate Pattern Colour Expression: cbcs. As seen in Tonkinese.

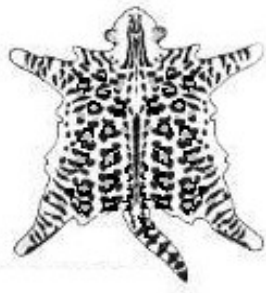
Mitted	<p>White Feet. A predominantly coloured cat with white limited to paws, back legs, belly, chest, and chin in most specimens. May also have a blaze. White does not extend beyond the wrist joint on the front feet. The cat is typically about 1/4 white. As seen in Ragdolls</p>  <p>The diagram shows a top-down view of a cat's underside. It is mostly black, representing the main body color. White areas are shown on the four paws, the back of the hind legs, the belly, the chest, and the chin. Above the cat, the text 'Bicolor / Bicolor' is written. Below the cat, the word 'Mitted' is written.</p>
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N	
Necklace	The bars - broken or unbroken - appearing in the neck area in tabby varieties.
Non-Agouti	A recessive gene that blocks the action of the agouti gene making the whole animal appear solid colour. The gene only works with the melanin pigment and not the phaeomelanin pigment: therefore cats with the orange gene will show tabby markings; to a greater or lesser extent depending on the tabby gene involved and selective breeding for or against tabby markings.


O	
Orange	The standard genetic designation for the terms: 'ginger' or 'marmalade' (red tabby) cat is Orange. The recognized symbol for this gene is O. It is located on the X chromosome i.e. it is a sex-linked gene


P																
Parti-colour	<p>This term has two different meanings - which is confusing:</p> <p>In some organizations the tortie colours are called parti-colour.</p> <p>In other organizations the colours with white (bi-coloured) are called parti-colour.</p> <p>A parti-colour 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 three 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	This is the term used for Fawn in the Australian Mist breed.															
Pencilling	Thin coloured lines on the face in Tabby Pattern.															
Pewter	A silver tipped or shaded 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>															
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6	7	8	9	10												
Harlequin		Van		Solid White												
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															
Pigment	Colour granules created from eumelanin or phaeomelanin molecules and deposited into skin, hair, eyes, and other tissues.															

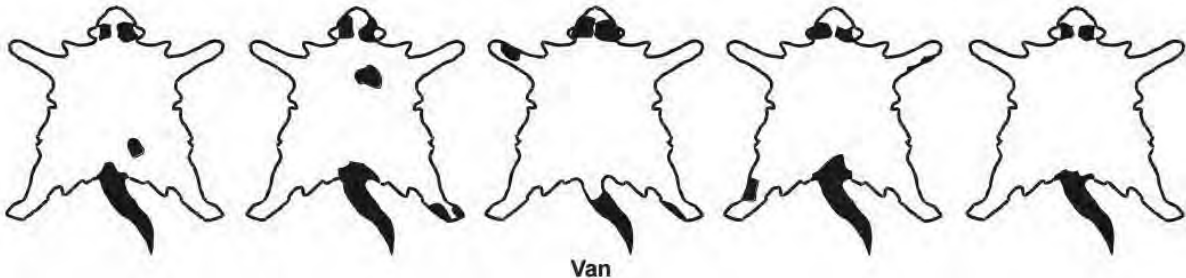
Platinum	In some organisations this term refers to the colour lilac.	
Points	All cats with the gene combination $cs\ c^s$, $cb\ cb$ or $cb\ cs$ - have points. The extremities of a cat's body: i.e., the mask on the face, the ears, the legs, and the tail are considered the points.	
Point Colour	<p>The 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:</p> <p>Solid: Seal (the pointed equivalent for Black), Blue, Chocolate, Lilac, Red, Cream Cinnamon, Fawn, Caramel and Apricot, the Tortie range and Tabby and Tortie Tabbies.</p>	
 <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>	 <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 chartreuse to gold.</p>	 <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>

Q	
R	
Red	<ol style="list-style-type: none"> 1. Red is the show term for the sex-linked orange gene- 2. A Strong reddish orange. The non-agouti gene with the phaeomelanin pigment so there will be tabby markings evident, the amount depending on which tabby gene and on selective breeding for or against barring. 3. Used instead of "cinnamon" in some organisations for Abyssinian/Somali.
Rex	Cats that have varying genetic mutations that effects their coats, which turn a cat's normally straight coat into curls, waves or ripples e.g.: Devon Rex, Cornish Rex, Selkirk Rex, <u>LaPerm</u> , etc.
Rings/Ringed	Darker coloured bands of hair on legs and tail of tabby cats
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.
Rosetted 	A variation of the tabby pattern whereby variable shapes are formed instead of spots and are outlined in a slightly darker colour of the pattern. As seen in the Bengal.
Ruddy	<ol style="list-style-type: none"> 1) In some organisations Tawny Abyssinians are called Ruddy Abyssinians. May also be called "Usual". 2) Highly rufoused genetic black ticked Abyssinian.
Rufous	Refers to the deepening of the yellow pigmentation to create 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 beige 'yellow' band of the wild tabby to a brilliant apricot colour; it changes the orange to a brilliant, rich colour. The Tawny Abyssinian is a rufoused, black-ticked tabby.
S	
Sable	In some organisations used to describe the brown of a Burmese. In Burmese, the colour black is called "sable".
Seal	The genetic colour black in cats with Himalayan (colour point) coat pattern is called seal.

Sex-linked gene	In cats refers to the 'O' gene (orange-commonly called red in domestic cats.)
Sepia	1) The pattern based on the Burmese gene ($c^b c^b$). 2) The pattern colour for the Singapura - dark brown ticking on a warm old ivory ground colour is also called this.
Scarab	The beetle shaped outline on the head, occurring in all Tabby breeds.
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.
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. Two types exist: Silver shell and Golden shell. Refer also to Chinchilla and Tipped
Silver  tipped shaded smoke silver tabby	The Inhibitor gene I results in the undercoat being silver-white and the colour being restricted to the upper part of the hair shaft of the upper coat. In silver agouti cats the yellow bands become silver-white.
Silver Tabby Point	When the agouti points (tabby point) have a silver-white ground colour.
Smoke	Combination of the inhibitor gene (silver) with the non-agouti gene. The hair shaft is 50-80% coloured with the remainder of the hair being silver.
Smoke Point	A solid pointed cat the roots of whose coat is silver.
Snow	Term used in some associations for: 1. Snow for the pointed (Siamese gene - $c^s c^s$) Bengal cat. An ivory background with a contrasting pattern. 2. Snow sepia the term for Bengal with the Burmese gene 3. Snow mink the term of the for Bengal with intermediate pointed/sepia gene combination.
Solid/Self	A term used to describe a cat with the same-coloured coat from nose to tip of tail. The individual hairs are one colour with no agouti banding on the hairs. The ACF (Inc.) standard solid coat colours are: Black, White, Blue, Chocolate, Lilac, Red, Cream, Cinnamon, Fawn, Caramel, Apricot See descriptions under alphabet listing of the colour.
Sorrel	In some organisations used to describe a cinnamon Abyssinian/Somali.

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.
Spectacles	Area of light hair surrounding the eyes. As seen in Tabby varieties.
Spotting	Refer also to Piebald Spotting or White Spotting.

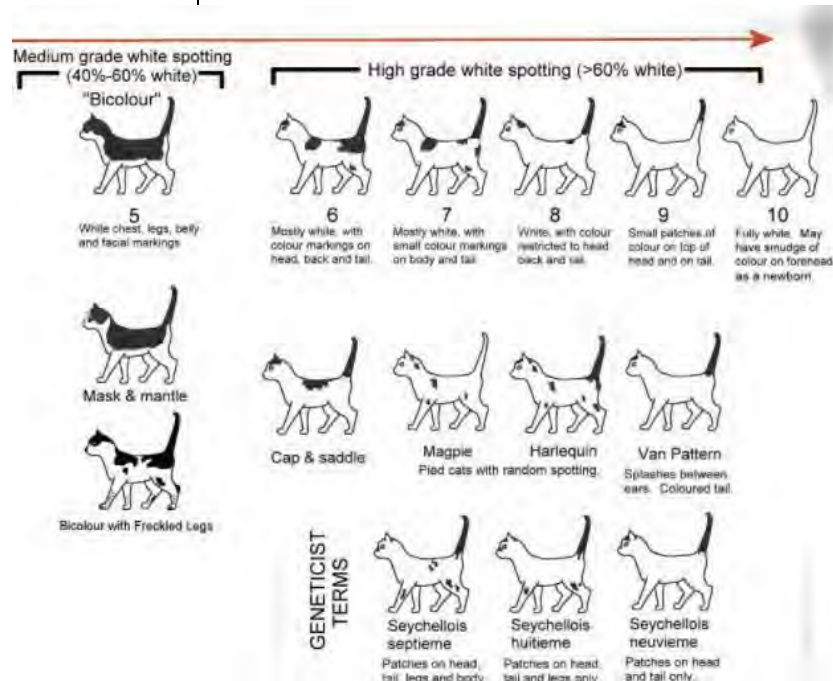
T	
Tabby Pattern	Refers to any of the 5 tabby patterns [Blotched (classic), Mackerel, Spotted, Marbled, and Ticked]. The agouti gene must be present for a full expression of a tabby pattern. Cream/red cats are the exception from the rule; these may display a distinct tabby pattern without having the 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 tabby markings.
Tarnishing	Yellow or brown pigmentation in the coat of a silver cat. A colour fault.
Tawny	ACF colour term for the genetic black Abyssinian
Thumbprint	A lighter central mark resembling a thumb print in shape, found on the outside of the ear in tabbies; the colour around the mark shows the base colour of the cats' 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, either silver or golden. 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 whose coat pattern incorporates tabby markings.
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.
Type	Skeletal and muscular body conformation. Refer also to Conformation.

U	
Usual	Alternative term for the Usual/ Ruddy/ Tawny Abyssinian
V	
Van Pattern	<p>White cat with colour confined to the extremities: head, tail and legs. One or two small, coloured patches on body allowable. Note: Cats having more than two small patches on body should be classified as bi-colour.</p> 
Vitiligo	<p>Vitiligo is depigmentation or lightening of the skin (leukoderma). Vitiligo is an uncommon, progressive skin and hair disease associated with melanocyte destruction. It leads to well-circumscribed areas of pigment loss that results in lightening of the skin and/or hair (leukotrichia or poliosis). Vitiligo is rare in the cat.</p> <p>In cats the nose and footpads are most commonly affected but lesions may also become generalized. The condition can possibly be genetic in some breeds.</p>

W	
Warm Coat	Coat exhibiting warm fawn, brown or cream tones.
White	<ol style="list-style-type: none"> 1. Pure white without markings or shadings of any kind. 2. Dominant white gene W which masks all other colours and patterns.

White-Spotting Gene

The white patches, caused by the Piebald Spotting gene, are called white spotting.



X

Y

Z

Part 4:

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 subject.

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 parti-colour) 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, bi-colour 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 as 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 ta

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 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. Parti-colour 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.

Genetic Terminology

A	
Agouti Signaling 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.
Allele	A gene may mutate to produce a new variety of that gene. Each allele can produce a distinctive phenotype.
Amelanistic	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.
Autosomal	Independent from sex. This term is used in genetics, when speaking of autosomal inheritance, i.e., sire and queen may inherit a trait.

B	
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C	
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.
Corin	<p>This gene, newly identified in cats 2021, produces a golden colour by its action of widening the band of phaeomelanin and restricting the eumelanin to the tip of the hair and tail.</p> <p>It is expressed in tabby cats and has autosomal recessive inheritance.</p> <p>The currently known variants of the CORIN gene are:</p> <p>CORIN:C.839G>A - extreme-sunshine Siberian cats. Symbol wb^{eSIB} (Siberian recessive extreme wideband allele)</p> <p>CORIN:C.2383C>T - sunshine Siberian cats. Symbol wb^{SIB} (Siberian recessive wideband allele)</p> <p>CORIN:C.2425C>T – copper/flaxen gold/akita British cats. Symbol wb^{BSH} (British recessive wideband allele. There are</p>

	multiple colour names for this mutation in British cats. CORIN: 12 recessive variants have been identified with colour variation in Brown tabby Bengal cats.

D	
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.
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).

E	
Eumelanin	Dark pigment that is visually black, chocolate, or cinnamon. Creates the colours blue, lilac, or fawn when combined with the “dilute” trait.

F	
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G	
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.
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.

H	
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.

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.
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).
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.

J	
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K	
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L	
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.
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.

M	
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.
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.
Inherited Melanocortin Receptor (MC1R)	A transmembrane protein present in melanocytes that is responsible for signalling the production of eumelanin or phaeomelanin 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.
Mutation	A change in genotype having no relation to the animals' ancestry. For example: Gene hr in the Sphynx 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.

N	
Natural Breed	Breed without the interference of selective breeding.

O	
Outcross	Breeding of two cats together that don't have ancestors in common for a minimum of three generations.

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 other loci. Masking is not the same as dominance.
Phenotype	The visible (physical) 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.
Polygenes	Genes that act in large numbers to produce modifications of traits e.g., patterns, colours, body size.
Purebred	A cat whose ancestors are of the same breed or are allowable outcrosses.

Q	
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R	
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.).

S	
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.

T	
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U	
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V	
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W	
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X	
Y	
Z	

Acknowledgements:

Information found in assorted 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),

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