



Dog Facts: About Dogs

ANATOMY OVERVIEW



Dogs possess many remarkable biological traits. They have a powerful sense of smell and can also hear sounds with great skill and acuity. Some dogs hunt primarily by sight and have a very wide range of vision. Sight Hounds, for example, can see three-quarters of the way around their heads. Even Scent Hounds have a field of vision reaching about 200 degrees, which is more than twice as large as a human's.

Having evolved as hunters that had to eat whatever they could catch, dogs do not possess discriminating taste buds. They can digest many kinds of food, however, and have distinct teeth that enable them to cut and shred meat with ease. Dogs' teeth are mounted into very powerful jaws that can exert five to ten times the amount of pressure of human jaws.

Some dogs can sense physical vibrations, enabling them to sense oncoming earthquakes or seizures in epilepsy sufferers. Dogs are built for endurance and are able to run at moderate speeds for very long periods of time. Some dogs, however, are both very fast and possess tremendous stamina. Most dogs have a natural swimming ability and are moderately agile in the water.

COAT TEXTURE

A dog's coat provides both warmth and protection and can appear in a wide variety of textures. There is a soft undercoat made of shorter hairs attached to hair follicles. Since the follicles are connected to the sebaceous glands that produce oils, the undercoat often provides insulation, shine and protection from moisture. The outercoat is composed of longer, coarser hairs and defines the overall character of the fur. In most dogs, the coats reach a natural length and pass through different phases during the year. Most dogs lose a lot of thickness twice a year to adjust to temperature and sunlight. Some dogs shed regularly, either because of confusing environmental signals or problems with diet, exercise and hormones.

There are five common coat textures, plus some unusual types. **Long coats** are common and are found in such breeds as Spitz dogs, Collies and Newfoundlands. These



hairs are long, but have a very slight kink, curl or texture to them. They will shed periodically and require dedicated combing during those times. **Curly coats**, belonging to such dogs as Poodles and Bedlington Terriers, have tightly curled fur. The hairs are relatively soft and usually shed very little. On the other hand, regular trimming and styling is required to keep them looking neat.

Afghan Hounds, Lhasa Apsos, most Spaniels and Setters wear **silky coats**. The hair is long, fine and smooth; it tends to trap dead hair and skin, however, making frequent bathing and grooming necessary. **Wiry coats** belong to Schnauzers and wirehaired breeds. Although the hairs may be short, the kinked texture makes them prone to matting. Regular clipping and combing prevents knotted coats. **Smooth-coated** dogs, such as Labradors and Boxers, require minimal care. The hairs are short and smooth, with little inclination to curl or mat. Very periodic grooming, and even less frequent bathing, will keep the coat healthy. Dogs with these coats should not be bathed too often, since they have trouble retaining natural oils.

There are also dogs with very unusual coats. Pulis and Komondors have **corded coats** that develop during the first two years of puppyhood. Even after a bath, the cords naturally form their shape and should not be brushed. A few rare breeds wear very thin coats that require gentle brushing.

SMELL

Although dogs vary in their ability to smell, they all possess extremely keen noses. In fact, smell is the most highly developed sense in domestic and wild dogs. While age, diet and environment may affect the scenting skill of a single dog or breed, a dog's sense of smell is, on average, about one million times more sensitive than our own. Dogs can detect and distinguish among millions of different smells. They also retain a strong memory of each smell, including the unique scent of each animal they encounter. They can follow trails over long distances and detect very faint concentrations of a scent.

They use smell to identify territory, the location of objects, other animals and even the mood of creatures they encounter. The canine nose is long and large, offering plenty of room for smells to be collected, sensed and sorted. The inside piece of the nose that



detects odor molecules in the air is about twenty square inches in size, compared with a mere half inch in humans. Thin bones help draw molecules of smell over this area, while a wet nose attracts and dissolves molecules from the air.

HEARING

Although all dogs possess excellent hearing, they vary in their abilities. In dogs with erect ears, the outside part helps focus sound waves. These extensions are controlled by 17 muscles, which enable the dog to move its ears in the direction of the sound. Dogs with low, droopy ears do not have this skill, and probably lack the extremely keen hearing of erect-ear breeds. The typical human can detect sounds between 20 and 20,000 Hertz (cycles of the sound waves per second). Dogs, on the other hand, can detect sounds up to 40,000 Hertz, which explains why dogs react to high-pitched sounds that humans cannot hear.

Dogs also possess the ability to detect rhythms and filter out unwanted sounds. Dogs use their remarkable hearing for many purposes, including hunting, protection and even finding a mate. Types of ears include: upright, dropped, tulip, pricked, folded & cropped.

VISION

While all dogs can detect objects in motion, visual acuity and visual fields vary from breed to breed and from dog to dog. Sight Hounds, for example, see better than dogs that hunt and sense primarily by scent. Sight Hounds can also see nearly three-quarters of the way around their heads. The visual field of Scent Hounds, on the other hand, is limited to slightly more than halfway around their heads. This field is quite broad, however, when compared to humans, who only see within one-third of the range around their heads.

Dogs also possess stereoscopic ability, or the physical setup to see objects in three dimensions, due to the forward position of their eyes. This skill is limited, however, to a far narrower range than that of humans. Most dogs have difficulty focusing on objects at close range or distinguishing how far an object is from their vantage point. They can see in color, but have a form of green color blindness, which alters their



perception of blues, greens and reds. Blues and greens appear white, while reds appear yellow. Overall, dogs can still distinguish many colors, but perceive them differently and in a more limited way than humans do.

PHYSICAL ALTERATION

Clipped ears have become part of the standard for some breeds, including Doberman Pinschers. Although some functional purpose for this alteration (such as protecting the ears in low brush) may have existed in the past, ear clipping is generally done today for cosmetic reasons or to suit a breed standard. For dogs not involved in show competitions, it is perfectly acceptable for the ears to remain in their natural state.

In the past, tail docking protected a dog's tail from injury, especially when a dog worked in the fields. While tail docking is less common today, it is sometimes done on large, powerful dogs whose thick, strong tails can inadvertently injure people's legs and damage family furniture. In such cases, the tails are clipped within the first week after birth.

Health Facts

The normal temperature of a dog is 101 to 102.5 degrees Fahrenheit. Because dogs come in a wide range of sizes, their heartbeats vary. A normal heart beats from 50 to 130 times a minute in a resting dog. Puppies & small dogs have faster pulse rates and large dogs have a slower pulse.

Healthy gums are firm, and pink, black or spotted, just like a dog's skin. Puppies have 23 baby teeth and no molars. Adult dogs have 42 permanent teeth, depending on the breed. A dog's nose is usually cool and moist. It can be black, pink, or self-colored (the same color as the coat), depending on the breed.

Gestation of a dog is 63 days in which a dog is pregnant with puppies

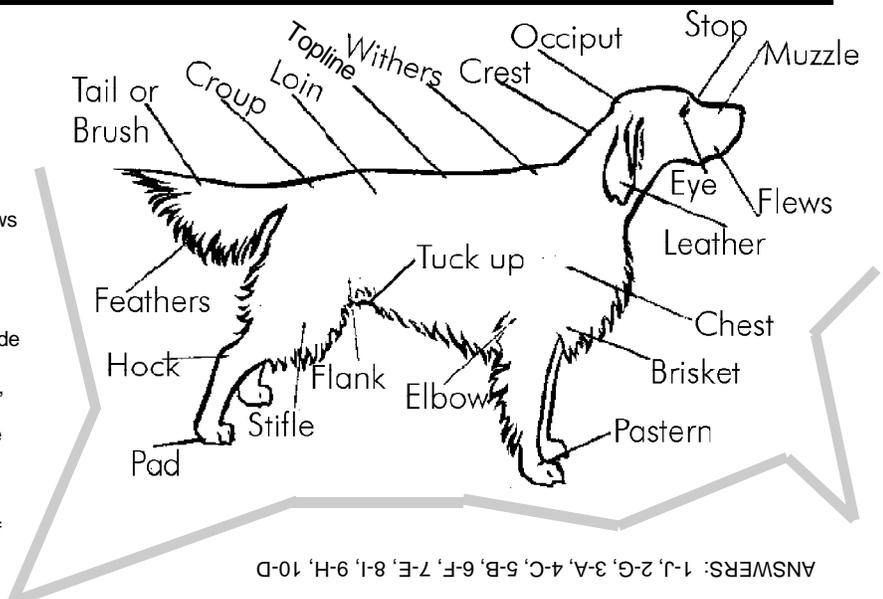
Definitions

- Apron Longer hair below the neck on the chest
- Balance When all the parts of the dog moving or standing still produce a harmonious image
- Bay prolonged bark or voice of the hunting hound
- Beard thick long hair on the underjaw
- Belton a color pattern in English Setters made of ticking or roaning
- Bitch female dog
- Bite the position of the upper & lower teeth when the mouth is closed. Positions include scissors, level, undershot or overshot
- Brace two of the same breed presented together as a pair
- Brush bushy tail, heavy with hair
- Canid the family (Canidea) of carnivores, including dogs, wolves, coyotes, foxes & jackals
- Condition health as shown by the coat, skin, general appearance & behavior
- Conformation . the form & structure, make & shape, arrangement of the parts in conformance with a dog breed standard
- Cropping the cutting of ear leather to cause the ear to stand erect
- Dam Female parent
- Dewclaw extra claw on the inside of a leg, a vestigial fifth toe removed on most breeds
- Dock to shorten a tail by cutting
- Dog male dog
- Dog Show competitive exhibition for dogs
- Double coat ... outer coat resistant to weather with an undercoat of softer hair for warmth & waterproofing
- Expression the general appearance of all the features of the head
- Fall hair overhanging the face
- Feathering fringe of hair on ears, legs, tail or body
- Flag long tail carried high
- Gait pattern of footsteps at various speeds, with a particular rhythm & footfall
- Genealogy recorded family descent of an animal
- Groom to brush, comb, trim or otherwise make a dog's coat & appearance neat
- Hackles hairs on neck & back that rise in fright or anger
- Hallmark A trait of the dog that identifies his breed, for example, the spectacles of the Keeshond, the hackney-like action of the Miniature Pinscher
- Haw a third eyelid or membrane on the inside corner of the eye
- Muzzle the head in front of the eyes - foreface, nose & jaws
- Neuter surgical removal of a dog's testicles to prevent reproduction
- Pads shock absorbing cushions on the underside of the feet
- Pedigree written record of a dog's parentage
- Point the immovable stance of a hunting dog to indicate the presence & position of game
- Purebred a dog whose sire & dam belong to the same breed, and are of unmixed descent since recognition of the breed
- Ruff thick, longer hair growing around the neck
- Sire Male parent
- Spay surgical removal of a bitch's ovaries & uterus to prevent reproduction
- Standard description of the ideal dog of each recognized breed, to serve as a word pattern by which dogs are judged
- Temperament . a dog's personality; the most important trait of all canines
- Topline the outline of the back from just behind the withers to the tail
- Webbed toes . toes connected by a skin membrane

Name that Part

Match the word to the definitions. Answers below!

- | | | |
|------------------|--------|--|
| A Breed Standard | ___ 1 | Pendulous upper lips |
| B Brisket | ___ 2 | Amputate the tail |
| C Pastern | ___ 3 | Description of breeds against which dogs are judged at shows |
| D Occiput | ___ 4 | Slender section of lower leg, between wrist & toes |
| E Croup | ___ 5 | The part of the body below the chest & between the forelegs |
| F Dewclaw | ___ 6 | The 5th digit (thumb) on the inside of the leg |
| G Dock | ___ 7 | Part of the back above the hips, extending to the root of the tail |
| H Feathering | ___ 8 | Sides of the body between the last rib & the hip |
| I Flank | ___ 9 | Long fringe of hair on the ears, legs, tail or body |
| J Flews | ___ 10 | The highest, upperback point of skull |



ANSWERS: 1-J, 2-G, 3-A, 4-C, 5-B, 6-F, 7-E, 8-I, 9-H, 10-D