



Programa de  
Esterlização Animal

StreetLife Animal  
Sterilisation Programme

*We support the sterilisation of pet dogs and strays in the East Algarve area*

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With access to the internet, we now have a huge body of accessible information about our beloved four-legged companions. Many of us are constantly surprised by the high levels of intelligence and ability to show enormous compassion inherent in our dogs.... and their smarts!

After retiring, Dr John Pilley, Professor of Psychology at Wofford College (South Carolina) became keenly interested in Border Collie trials. Pilley was surprised to learn that working Border Collies were able to identify individual sheep by name which suggested that they seemed to be capable of **problem solving**. Some years later, after working with his own Border Collie... Chaser, she had 1,000 identifiable toys and he invited Neil de Grasse Tyson to test her knowledge. The 6-minute video clip is of Neil testing Chaser's ability to identify toys. Neil introduces a doll unknown to Chaser, called Darwin to establish whether this Collie could use **inferred thinking** and the result is quite astounding.

A lot has been written by Stanley Coren, PhD (psychology professor, neuropsychological researcher and writer on the intelligence, mental abilities and history of dogs). He worked in research and instructed in psychology at the University of British Columbia in Vancouver, British Columbia. In his book *Born to Bark*, Coren describes three major types of dog smarts.... instinctive intelligence (bred), adaptive intelligence (learning) and working/obedience intelligence (taught).

The bumper sticker "My Border Collie is smarter than your honor student" may be an exaggeration, but these dogs are considered the smartest breed in training and obedience. In a survey, 199 of 208 obedience training judges ranked Border Collies in the top 10. The others, in order, were Poodles, German Shepherds, Golden Retrievers, Dobermans, Shetland Sheepdogs, Labrador Retrievers, Papillons, Rottweilers and Australian Cattle Dogs.

Sorry, Afghan Hound fans....these dogs ranked lowest on tests of working and obedience intelligence. They were considered the least "trainable" breed, followed by the Basenji, Bulldog, Chow Chow, Borzoi, Bloodhound, Pekingese, Beagle, Mastiff and Basset Hound.





Cat lovers and dog lovers argue this one all the time and it seems to depend on what we mean by "smarter." In tests, cats are smarter when it comes to using their paws; like to pull strings or levers (I think we can all relate to that trait). However, dogs are more trainable, more social and more able to understand human gestures and words.

There's also the issue of brain size. In proportion to their body sizes, dog brains are bigger than cat brains. In the science world, brain size is usually a pretty reliable measure of a species' smarts. In the same way, large breed dogs are generally more intelligent. Dogs today have bigger brains relative to their body size than their ancestors. This is thought to be due to selective breeding for skills that require intelligence such as hunting, guarding, guiding and shepherding.



The average dog can learn 165 words. "Super dogs" (those in the top 20% of intelligence) can learn 250 words, and the very smartest dogs may be capable of much more..... like Chaser. Have a look at the video on YouTube!



In other work done by Coren, he explains that whilst you can't ask a dog the question... "what is one plus one", tests do show that dogs can count up to 4 or 5 and **understand the idea of addition and subtraction**. They're more likely to choose the bowl with 5 pieces of food rather than another with only 2 pieces of food.

Dogs do understand simple ideas of **space** and are quite good at mentally mapping their situational awareness, as long as they have some landmarks.

Whilst the concept of **time** is a little harder, dogs do understand that things happen in some kind of order. They understand that one event happens before or after something else.

When it comes to **social intelligence**, dogs are very clever - not only can they interact well with other dogs, but they are also really good at communicating with humans. Coren ranks their social intelligence on a par with human teenagers. They understand who's who in the pack and how the relationships work.

On average, a dog has the **language** understanding of a 2-year old child and has the same understanding of numbers as child between 2 and 3 years old..... like Chaser.

**We can make our dogs smarter**..... dogs raised in a mentally stimulating environment learn faster than dogs raised in a boring one. New experiences and challenges, as is the case with humans, help to form new neural connections inside a dog's brain.

It's not easy and not a lot of work has been done on the comparison of intelligence between species but based on brain and body size, dogs are among the smartest animals on the planet. Only humans, the great apes, porpoises and elephants are smarter.

Like humans, dogs may be smart because they've had to use their brains to catch their prey or because they are social.... they need brain power to communicate and co-operate.

Experiments show that dogs are **capable of fooling** people and other dogs to get what they want. During play, a human succeeds in fooling a dog around 47% of the time and dogs in fact, have almost the same rate of success - they're able to fool their humans around 41% of the time.

The idea that you "**can't teach an old dog new tricks**" is a fallacy - new mental challenges, activities and exercise will certainly hold back the mental decline that's sometimes a part of aging. Of course, we know that this is true for humans too. Canine cognitive dysfunction syndrome in dogs is often compared to Alzheimer's disease in people, leading to disorientation, unresponsiveness and social withdrawal.

Ongoing research suggests therefore, that the more our knowledge grows, the more we need to realise that dogs are smart, intelligent, compassionate and capable of great love.