

# Memory Lane With Your Feline Friend: Inside the Mind of Your Cat

Explore how your cat's memory works, from hunting instincts to emotional associations and beyond.

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## STORY AT-A-GLANCE

- Studies show that like dogs and humans, cats possess short- and long-term memory, and spatial memory as well
- And like us, the ability of cats to store new memories declines with age, but it's thought their ability to access stored memories probably lasts a lifetime
- Research suggests a cat's memory is most acute when attached to a strong emotion, either positive or negative
- Some scientists believe cats may remember for much longer periods than experiments have measured, and that cats are on a par with dogs on a variety of mental tests

Many a curious cat guardian has asked, "Do cats have memories?"

## Cats Possess Short-Term, Long-Term and Spatial Memory

Like dogs and humans, research into our feline friends suggests that of course they, too, possess both short- and long-term memory. And also like us, the feline memory originates from the brain's hippocampus, and kitties rely on past experiences to remember things.

A 2017 study of 50 cats showed they could remember which bowl contained food after they were removed from the test area for 15 minutes, demonstrating they have short-term working memory, especially when it comes to food.<sup>1</sup>

And in a 2008 study, the kitty participants proved they possess spatial memory as evidenced by their ability to remember which cups of food they'd already eaten from when other half-eaten cups of food from other cats were present as well.<sup>2</sup>

## How Cats Use Their Memory

Cats' short-term (aka working) memory helps them with tasks such as hunting for food, and locating objects hidden from them. However, a 2006 study titled "Duration of cats' (Felis catus) working memory for disappearing objects" suggests the ability to find those objects decreases with time.<sup>3</sup>

Their long-term memory helps cats recall things they were exposed to during kittenhood that continue to influence their behavior and reactions as they mature. For example, a cat may react negatively to a particular person, place or noise based on a past adverse experience.

*“Episodic memory is a form of long-term memory where cats remember specific events in detail,” writes veterinarian Dr. Barri Morrison in PetMD. “This allows cats to recall both the ‘what’ and the ‘where’ when investigating scenarios, especially surrounding food.*

*Episodic memory is a type of associative memory, meaning it allows for the linking of specific events or experiences with contextual details such as time, place, and emotional significance. Food is not only necessary to sustain life, but it also plays a central role in triggering important memories.”<sup>4</sup>*

Again, like humans, the ability of cats to store new memories declines with age, but it’s thought their ability to access stored memories probably lasts a lifetime.<sup>5</sup>

## What Cats Remember

There aren’t many studies that examine what, specifically, cats remember, but according to Morrison, research shows that a cat’s memory is most acute when attached to a strong emotion, for example, their love for a favorite human, or a favorite food.

Of course, negative experiences of, say, neglect or abuse also elicit strong emotions. So, a kitty may be skittish, wary, or reactive in situations or around humans as a result of unpleasant or frightening memories.

Interestingly, a 2016 study of female cats and their litters revealed that kittens remember their mother’s vocalizations. The kittens showed a response upon hearing their mom’s chirping and meowing, but not when they heard those sounds from an unfamiliar cat.<sup>6</sup>

*“It is thought that cats remember their littermates for up to two years through their scent and from the bond that was made during kittenhood,” writes Morrison. “Cats who were with their littermates less than two to three months as kittens often have fewer memories than those cats who were with their littermates until adulthood, around 1 year of age. The longer a cat was with their littermates, the more memories they have with them. This is a demonstration of long-term memory.”*

## Cats vs. Dogs

In the 2017 study involving 50 cats mentioned earlier, the researchers fed the kitties using multiple bowls of food over time. They learned which **types of food the cats preferred** and served it to them in a specific bowl, which caused the kitties to form memories of what was served and when. Later, they switched up the bowls to observe whether a given cat remembered such details.

Other experiments the researchers performed showed the kitties were able to remember if they had previously searched a given bowl when looking for a particular type of food and the circumstances under which it occurred.

The research team believes cats may remember for much longer periods than their experiments measured, and they also say cats are on a par with dogs on a variety of mental tests, including responding to human gestures, facial expressions, and emotions.

*"Understanding cats more deeply helps to establish better cat-human relationships," Takagi said. "Cats may be as intelligent as dogs, as opposed to the common view of people that dogs are much smarter."*

The question of who's smarter, dogs or cats, is actually a tricky topic to investigate because even the question is problematic. Dogs and cats are different species, after all, so comparing intelligence between them is like comparing apples to bananas.

As Stanley Coren, Ph.D., author of *The Intelligence of Dogs*, writes in *Psychology Today*:

*"In the case of dogs versus cats ... each are specialized to do different things. Dogs are designed to be more efficient runners while cats have better ability at manipulating things with their paws.*

*Thus a test that involved pulling strings or operating levers would tend to favor a cat, while a test involving moving from place to place, where speed is a measure of performance, would favor a dog.*

*Charles Darwin claimed, 'Intelligence is based on how efficient a species became at doing the things they need to survive,' and one might argue that by this definition all species that stay healthy, remain numerous and avoid extinction are equally intelligent."*<sup>7</sup>

The theory that bigger brains are associated with increased intelligence is true to a point, but problems arise because bigger animals require larger brains (but this does not necessarily indicate superior intelligence).

## Sources and References

<sup>1</sup> [Tagaki, S. et al. Behavioural Processes, Volume 141, Part 3, August 2017, Pages 267-272](#)

<sup>2</sup> [McCune, S. et al. Applied Animal Behaviour Science, Volume 112, Issues 3-4, August 2008, Pages 345-356](#)

<sup>3</sup> [Fiset, S. and Dore, F. Animal Cognition, Volume 9, Pages 62-70 \(2006\)](#)

<sup>4,5</sup> [PetMD, February 23, 2024](#)

<sup>6</sup> [Szenczi, P. et al. Developmental Psychobiology, 2016 Jul;58\(5\):568-77](#)

<sup>7</sup> [Psychology Today, December 3, 2010](#)

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