
What Are Mutts Made Of?

Article

DENVER, Colorado (Achieve3000, May 28, 2009). When Will Colosimo, 45, adopted his dog Allie in 2003, he was aware that she was a mutt. What he wasn't sure of was which breeds she was descended from. Colosimo thought Allie displayed the characteristics of a breed called basenji, but he wasn't sure. He had adopted Allie from the Colorado Basenji Rescue group. Still, workers there doubted that she had any of that small, short-haired breed in her. Curiosity eventually got the better of Colosimo. Like many pet owners in recent years, he sought out one of several DNA tests available today to identify a mixed-breed dog's ancestry.

Upon receiving the results, Colosimo was shocked. Allie was in fact a mix of German shepherd and dachshund. "The German shepherd I can totally see," said Colosimo, "but dachshund?"

Martha Smith is a veterinarian at the Animal Rescue League of Boston. Smith is not surprised that Colosimo was wrong about his mutt's breed.

"We're really bad guessers at what [breeds] dogs are," Smith said. Smith's shelter has performed DNA tests on a few of its dogs. "We found out from the handful of tests that we ran that we were way off base [in presuming the dogs' breeds]," she said.

To determine Allie's ancestry, Colosimo used a DNA test kit. The test can be purchased in stores or online. This method of DNA testing involves swabbing the inside of the dog's cheek and mailing the sample to a lab. The test is offered at two levels. The standard breed test costs about \$50. It can identify a mutt's ancestry from about 50 dog breeds. The "XL" breed test costs about \$120. It can identify a dog's ancestry from about 100 breeds.

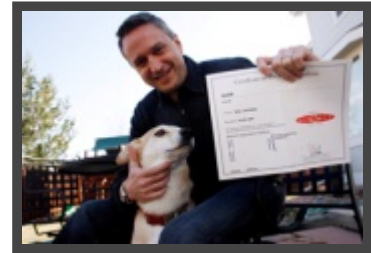
A blood-drawn test is also available for determining a mixed-breed dog's ancestry. This test is performed in a veterinarian's office. It identifies genes from a base of 157 breeds. This test costs about \$200. That includes a veterinary appointment for reviewing the results. Smith prefers the blood-work test over the cheek-swab test because it checks for more breeds. In addition, depending on the DNA results, some dog owners may need follow-up counseling.

"Some people might've been happy with what they thought they had. Then [a breed they didn't want] shows up," Smith said. A veterinarian can reassure owners that "the dog you now have more information about is the dog you still love," she explained.

Experts say the two types of DNA tests work equally well. "DNA is DNA," said Theresa Brady. Brady represents the company that provides the cheek-swab DNA testing kits. "The sampling method doesn't make a difference."

No matter which DNA testing method is used, Smith and other vets caution that the DNA tests should be conducted "for fun and entertainment" only. They should not be done, they say, for diagnostic purposes.

"It's just a test for owners," said Kelly Best. Best is a veterinarian in Colorado. "I don't know that it has any medical benefits at all." This is true even for purebreds that are predisposed to develop certain diseases, Best added.



AP Photo

DNA tests can show the ancestry of mixed-breed dogs. This man tested his dog Allie.

A DNA test can be helpful, however, in explaining a dog's behavior. Karin Hendersin, 52, discovered this after DNA testing her mutt, Splash. The dog resembles a pit bull. This breed is banned in Hendersin's city. But DNA testing showed no pit bull genes whatsoever. Splash is part Chinese Shar-Pei, part Labrador, and part Dalmatian.

"It explains why she's such a runner," Hendersin said, noting the Dalmatian genes. "We take her to the dog park and a whole herd of dogs will chase her."

Smith has run the blood test on many pets. She claims that for many owners, opening the test results is like opening a gift.

"A lot of times people are right," Smith said. "And a lot of times they're wrong." But when they get their test results, she added, "people are really, really excited."

The Associated Press contributed to this story.



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Dictionary

diagnostic (*adjective*) having to do with determining the cause of an illness or other problem

DNA test (*noun*) a test that looks at material from a living thing and gives information about the building blocks of that living thing

predisposed (*adjective*) inclined to do something

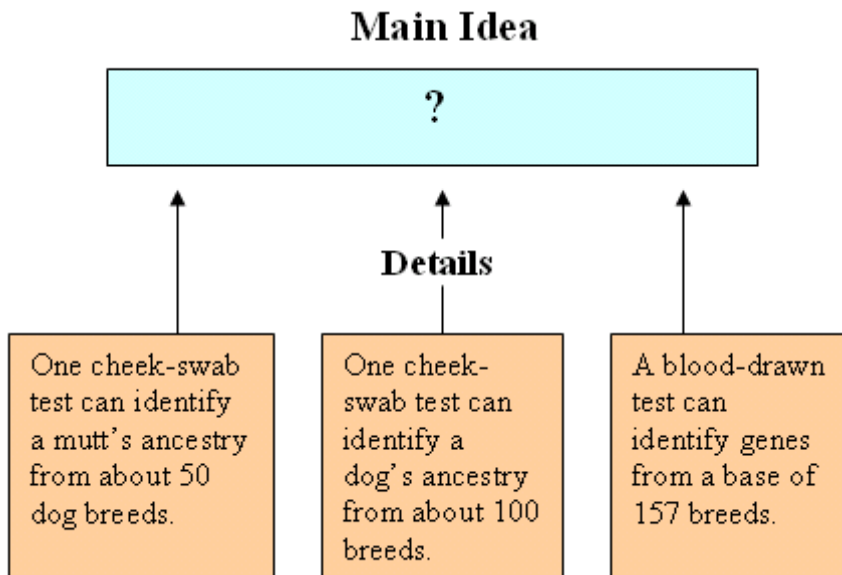
swabbing (*noun*) the soaking up of a small bit of something using a small stick with a cotton tip (such as a Q-tip)

veterinarian (*noun*) an animal doctor

Activity

PART 1

Question 1



Based on the article, which best replaces the question mark in the diagram above?

- (A) There are several DNA tests available to determine a mixed-breed dog's ancestry.
- (B) Vets caution that DNA tests should be conducted for fun and entertainment only.
- (C) Owners are often way off base in presuming a mixed-breed dog's ancestry.
- (D) Owners of mutts often aren't sure which breeds their pets descended from.

Question 2

According to the article, how are cheek-swab DNA tests and blood-drawn DNA tests similar?

- (A) Both tests help pet owners identify a dog's ancestry.
- (B) Both tests can be performed by owners in their homes.
- (C) Both tests are available for purchase in stores or online.
- (D) Both tests can identify a dog's ancestry from about 100 breeds.

Question 3

Which of these is a statement of opinion?

- (A) Martha Smith is a veterinarian at the Animal Rescue League of Boston.
- (B) It is too expensive to take a pet to a veterinarian for DNA testing.
- (C) Will Colosimo's dog Allie is a mix of German shepherd and dachshund.
- (D) The standard breed cheek-swab DNA test costs about \$50.

Question 4

The article states:

Smith *prefers* the blood-work test over the cheek-swab test because it checks for more breeds.

Which would be the closest **synonym** for the word *prefer*?

- (A) Issue
- (B) Resist
- (C) Favor
- (D) Request

Question 5

According to the article, why does Dr. Martha Smith prefer the blood-work test over the cheek-swab test?

- (A) Because the blood-work DNA test costs only about \$120
- (B) Because the blood-work DNA test explains a dog's behavior
- (C) Because the blood-work DNA test can be performed at home
- (D) Because the blood-work DNA test checks for more breeds

Question 6

The article states:

The test can be purchased in stores or online. This method of DNA testing involves swabbing the inside of the dog's cheek and mailing the sample to a lab. The test is offered at two levels. The standard breed test costs about \$50. It can identify a mutt's ancestry from about 50 dog breeds. The "XL" breed test costs about \$120. It can identify a dog's ancestry from about 100 breeds.

The author's purpose in writing this passage was to _____.

- (A) Explain why the XL breed DNA costs more than the standard breed test
- (B) List some of the reasons why vets recommend that pet owners use DNA tests
- (C) Describe two kinds of DNA tests that pet owners can perform on their own
- (D) Convince readers that the standard breed DNA test is a better deal than the XL test

Question 7

The article states:

Colosimo thought Allie displayed the *characteristics* of a breed called basenji, but he wasn't sure.

Which would be the closest **synonym** for the word *characteristic*?

- (A) Attitude
- (B) Substance
- (C) Quality
- (D) Specimen

Question 8

The news article says all of the following **except** _____.

- Ⓐ DNA testing has proven to help prevent future health problems in some dogs.
- Ⓑ Taking a DNA test can be helpful in explaining a dog's behavior.
- Ⓒ Several DNA tests are available to identify a mixed-breed dog's ancestry.
- Ⓓ A blood-drawn DNA test can identify genes from a base of 157 breeds.