

## Candid about Canines

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Name \_\_\_\_\_

Believe it or not, there are 60 million pet dogs in America as reported by the U.S. Pet Ownership. Of those 60 million dogs, what breed is the most popular? If you guessed the Labrador retriever, you are correct. Do you think most dogs sleep on the floor, in a dog house, or on the owner's bed? Statistics show that more than 10 million dogs, or one out of six American pet dogs, sleep on their owner's bed. And, according to the American Pet Association, 31 million dog owners purchase Christmas gifts for their pet dogs. These dogs probably have their own stockings! In this month's Internet Challenge™, you will learn about the history of dogs and their role in the society today. Are you ready to begin our canine crossing?

To begin, let's take a trip to the BBC's Science and Nature page about [Dogs](http://www.bbc.co.uk/nature/animals/pets/dogs.shtml) located at [www.bbc.co.uk/nature/animals/pets/dogs.shtml](http://www.bbc.co.uk/nature/animals/pets/dogs.shtml).

Read closely through this short historical review, and then begin answering the first set of questions.

1. What is the average life span of a dog?
2. Name three reasons why wolves were domesticated by man.
  - a.
  - b.
  - c.
3. People exploited these animals for their own purposes. Which word is an antonym for the term exploit?
  - a. profit by
  - b. respect
  - c. capitalize on
  - d. manipulate
4. Which animals are included in the Canidae family?
5. How does today's domestic dog differ from the grey wolf?

### Super Start!

Next, let's travel to The Natural History Museum of Los Angeles County's [Dogs: Wolf, Myth, Hero, Friend](http://www.nhm.org/exhibitions/dogs/index.html) at <http://www.nhm.org/exhibitions/dogs/index.html>. Begin exploring this Web site by clicking the orange "Evolution and Diversity" button. Next, scroll down and click "Natural and Artificial Selection."

Read about both Natural Selection and Artificial Selection by clicking each link on this Web page. When you are done, answer the next set of questions.

6. With artificial selection, humans decide which breed survives. However, with the natural selection the process is different. Explain.

7. Who coined the term *natural selection*?

8. Currently, what is the number of wild canine species?

a. 15

b. 27

c. 35

d. 38

9. What is the purpose of the fennec fox's funny-shaped ears?

10. How has the gray fox adapted to life in the forest?

11. Once the breed standards of a pure-breed dog are established, the look of a pure breed dog will not change over time.

a. True

b. False

**Great!**

**On the left side of your screen, click on the green "Canine Communication" button. Read about body language and vocalizations by clicking on each link, and then continue answering questions.**

12. Describe the three easiest canine emotions to read.

a.

b.

c.

13. Wolves rarely bark, but dogs bark all the time. What does this Web site suggest about barking dogs?

**Good answers!**

**Now, click on the "Form and Function" button on the left side of your screen. Read through the opening page, and then click on each of these links: Sense of Hearing, Sense of Sight and Sense of Smell. Once you're done, complete the questions.**

14. Dogs only respond to lower pitched sounds that humans cannot typically hear.
- a. True
  - b. False
15. Explain how a dog's placement of the ear and its shape enables the dog to hear better than humans.
16. What is the night "eyeshine" and its advantage to the dog?
17. Which of the dog senses is most highly developed?
18. There are 60 million Americans who own dogs as pets. Based on what you've learned, how would you explain the popularity of dogs.

### Extension Activities—do all three!

1. Dogs make great pets, but they also help our society. Independently, research how canines are used in a service role. To begin, review [K-9 History: War Dogs In The U. S. Military](#) found at <http://www.47ipds.us/47k9hist.htm>. This site begins with K9 units used in World War I through the Vietnam War. Next, examine police K9 units. At the [Tampa Police K-9 Unit FAQ page](#) ([www.tampagov.net/dept\\_police/Special\\_Operations/K-9/K9\\_FAQ.asp](http://www.tampagov.net/dept_police/Special_Operations/K-9/K9_FAQ.asp)), quickly read facts about the dog units. To see dogs in action, visit [Detector Dog](#) at [www.detectordog.com/](http://www.detectordog.com/). Click on the different sections to see and learn more. Last, dogs aid people that have certain disabilities. For example, read the [History of Seeing Eye Dogs](#) at [www.seeingeye.org/GuidedTour.asp](http://www.seeingeye.org/GuidedTour.asp) and explore the other links at the Web site. After checking out these sites and others on your own, create a brochure about service dogs.
2. Do you really like dogs? Did you know that there are many dog-related careers that may be of interest to you? Visit The American Kennel Club's [Careers in Dogs](#) at [www.akc.org/public\\_education/careers.cfm](http://www.akc.org/public_education/careers.cfm) and learn more about professions in the dog world. Once you read about the many opportunities, write a short essay about a dog-related career you many want to pursue as an adult.
3. You have been given the task of finding a dog for either for a family with young children or an elderly person. Which dog would be best for that household and why? On the Internet, find out more about dog breeds at sites like [Dog Breed Information Center](#) at <http://dogbreedinfo.com/> and [Terrific Pets- Dog Breeds](#) at [www.terrificpets.com/dog\\_breeds/](http://www.terrificpets.com/dog_breeds/). Research and choose the right dog breed for the household. On a poster, write facts about the specific dog breed and why it is a perfect match for the household. Also, be sure to decorate the poster with pictures of the breed.

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**Congratulations!** You have done a tremendous job in completing this month's Internet Challenge™.

## Answers to Summer's Internet Challenge™

1. The average life span of a dog is 12–14 years.
2. Wolves were domesticated because man needed them to guard, hunt, and herd.
3. B
4. The Canidae family includes dogs, wolves, foxes, and coyotes.
5. Today's domestic dog differs greatly from the grey wolf. A dog does not hunt wild prey. The grey wolf not only hunts its prey, but travels long distances in search of it. In addition, the grey wolf hunts in a pack. The dog lives in a home where no hunt is required and does not travel in a pack.
6. With natural selection, only those that can meet nature's challenges are the ones that survive and breed.
7. Charles Darwin coined the term natural selection.
8. C
9. Since the fennec foxes live in the desert, they tend to overheat. When this happens, they shunt or send blood to their large ears to rapidly dump the excess body heat into the environment.
10. The gray fox is a climbing canine. This climbing ability enables him to find food in the trees and avoid his predators.
11. A
12. The three easiest emotions to read are aggression, submissiveness, and playfulness. When the canine is expressing aggressive emotions, the animal will stand tall with ears pricked, show its teeth and erect its fur on the spine. In many cases, they bark or howl, too. Submissive canines lower their bodies and lie on their backs, bellies up. When wolves or dogs want to play they raise their rear and lower their forequarters in a "play-bow" posture.
13. Dogs are alarm barkers, barking all the time. All this barking may be a result of early breeding of the first dogs where humans selected for effective guarders -- more specifically, the noisiest!
14. B
15. Dogs can easily adjust and rotate their ears in order to better hear. Also, a dog's upright, curved ears help direct and amplify sound. Erect ears, like those of wild canids, hear better than the floppy ears of many domestic breeds.
16. Like many other mammals, the dog has a mirror-like tissue in its eyes. This tissue enhances night vision by reflecting incoming light back through the retina. This re-stimulates the eyes' light-sensing cells and boosts their signal to the brain. If your flashlight catches a dog's eyes at night, you'll see this reflected light gleaming back at you as "eyeshine."
17. The dog's sense of smell is its most highly developed sense.
18. Students' answers will vary.

**Extension Activities**—Students' own work.