

Calcasieu Parish 4-H Dog Science Contest Study Guide

Please use the following study guide to prepare for the Dog Science Contest. Questions for the contests will be taken directly from this study guide AND the websites and sources listed.

ELEMENTARY BREEDS TO KNOW

Australian Shepherd
Basset Hound
Beagle
Bearded Collie
Border Collie
Boxer
Bulldog
German Shepherd Dog
Great Dane
Great Pyrenees
Labrador Retriever
Pug
Yorkshire Terrier

SENIOR BREEDS TO KNOW

ALL ELEMENTARY AND JUNIOR BREEDS AS WELL AS

Afghan Hound
Akita
Australian Cattle Dog
Beagle
Belgian Malinois
German Shorthaired Pointer

INFORMATION FOR ALL BREEDS AND STANDARDS
CAN BE FOUND AT WWW.AKC.ORG

JUNIOR BREEDS TO KNOW

ALL ELEMENTARY BREEDS AS WELL AS

Bull Terrier
Old English Sheepdog
Pomeranian
Redbone Coonhound
Rhodesian Ridgeback
Vizsla



The following contains basic information for new dog owners sourced from the American Kennel Club (AKC). Links to website and news articles should also be read and contestants may be asked questions regarding information found.

Information for **ELEMENTARY** contestants will be highlighted in **YELLOW**

Information for **JUNIOR** contestants will be ALL OF THE **YELLOW** HIGHLIGHTS and **BLUE**

Information for **SENIOR** contestants will consist of ALL **YELLOW** AND **BLUE** INFORMATION AND **GREEN**

NUTRITION

What Affects How Often a Dog Should Eat?

Veterinarians recommend feeding a dog at least twice per day. Dogs with medical issues or dietary needs may require specialized feeding schedules or restrictions on what they eat. Talk to your veterinarian about your dog's eating habits to make sure you are meeting their nutritional needs and healthcare requirements.

Breed plays a large role when deciding how often to feed your dog. Common large breed dogs, for instance, will often require more feedings and more calories per day than medium and small breed dogs. Age is also another important consideration. The caloric requirements for a two-month-old Yorkshire Terrier varies greatly compared to a two-year-old Yorkie.

What Sort of Feeding Schedule Works?

Free-feeding, or always leaving food available to dogs, is often not recommended by veterinarians. For multi-species or multiple-dog households, free-feeding makes it difficult to account for different diets and to track each dog's intake. Additionally, free feeding can lead to obesity when dogs overeat.

Sticking to a schedule can help your canine companion avoid grazing, feel like part of the family, and can encourage good mealtime behavior. You should plan a feeding schedule by consulting with your veterinarian.

Give the Dog a Bone

Bones are a good source of minerals and other nutrients and help satisfy your dog's appetite. Chewing stimulates saliva enzymes and helps prevent plaque buildup on teeth and gum disease. And a dog chewing on a dog bone is less inclined to excessively scratch or lick his paws. However, many veterinarians believe it just isn't worth the risk of serious injuries to give your dog a bone. If you are considering giving him a bone, here are some rules to follow for his safety.

Don't:

- Don't give your dog the wrong kind of bone.
- Don't give you dog cooked bones of any kind.

- Don't let your dog chew any kind of bone into small pieces. Don't give your dog chunks of bone that can cause blockages.
- Don't give your dog a bone if he has stomach problems.
- Don't give your dog a bone to chew on if there's another dog visiting.

Do:

- Offer raw meat bones.
- Take the bone away from your dog after 10-to-15 minutes and put it in the refrigerator.
- Dispose of a bone after three or four days.
- Give large breeds, such as German Shepherd Dogs, Bloodhounds, and Mastiffs, large bones.
- Do supervise your dog when you give him a bone.
- Be an educated consumer

VACCINATIONS AND DISEASES

Bordetella Bronchiseptica

This highly infectious bacterium causes severe fits of coughing, whooping, vomiting, and, in rare cases, seizures and death. It is the primary cause of kennel cough. There are injectable and nasal spray vaccines available. If you plan on boarding your puppy in the future, attending group training classes, or using dog daycare services, often proof of this vaccination will be a requirement.

Canine Distemper

A severe and contagious disease caused by a virus that attacks the respiratory, gastrointestinal (GI), and nervous systems of dogs, raccoons, skunks, and other animals, distemper spreads through airborne exposure (through sneezing or coughing) from an infected animal. The virus can also be transmitted by shared food and water bowls and equipment. It causes discharges from the eyes and nose, fever, coughing, vomiting, diarrhea, seizures, twitching, paralysis, and, often, death. This disease used to be known as "hard pad" because it causes the footpad to thicken and harden.

There is no cure for distemper. Treatment consists of supportive care and efforts to prevent secondary infections, control symptoms of vomiting, seizures and more. If the animal survives the symptoms, it is hoped that the dog's immune system will have a chance to fight it off. Infected dogs can shed the virus for months.

Canine Hepatitis

Infectious canine hepatitis is a highly contagious viral infection that affects the liver, kidneys, spleen, lungs, and the eyes of the affected dog. This disease of the liver is caused by a virus that is unrelated to the human form of hepatitis. Symptoms range from a slight fever and congestion

of the mucous membranes to vomiting, jaundice, stomach enlargement, and pain around the liver. Many dogs can overcome the mild form of the disease, but the severe form can kill. There is no cure, but doctors can treat the symptoms.

Coronavirus

The canine coronavirus is not the same virus that causes COVID-19 in people. COVID-19 is not thought to be a health threat to dogs, and there is no evidence it makes dogs sick. Canine coronavirus usually affects dogs' gastrointestinal systems, though it can also cause respiratory infections. Signs include most GI symptoms, including loss of appetite, vomiting, and diarrhea. Doctors can keep a dog hydrated, warm, and comfortable, and help alleviate nausea, but no drug kills coronaviruses.

Heartworm

When your puppy is around 12-to-16 weeks, talk to your vet about starting a heartworm preventive. Though there is no vaccine for this condition, it is preventable with regular medication that your veterinarian will prescribe.

The name is descriptive — these worms lodge in the right side of the heart and the pulmonary arteries (that send blood to the lungs), though they can travel through the rest of the body and sometimes invade the liver and kidneys. The worms can grow to 14 inches long and, if clumped together, block and injure organs.

A new heartworm infection often causes no symptoms, though dogs in later stages of the disease may cough, become lethargic, lose their appetite, or have difficulty breathing. Infected dogs may tire after mild exercise. Unlike most of the conditions listed here, which are passed by urine, feces, and other body fluids, heartworms are transmitted by mosquitoes. Therefore, diagnosis is made via a blood test and not a fecal exam.

Kennel Cough

Also known as infectious tracheobronchitis, kennel cough results from inflammation of the upper airways. It can be caused by bacterial, viral, or other infections, such as Bordetella and canine parainfluenza, and often involves multiple infections simultaneously. Usually, the disease is mild, causing bouts of harsh, dry coughing; sometimes it's severe enough to spur retching and gagging, along with a loss of appetite. In rare cases, it can be deadly. It is easily spread between dogs kept close together, which is why it passes quickly through kennels. Antibiotics are usually not necessary, except in severe, chronic cases. Cough suppressants can make a dog more comfortable.

Leptospirosis

Unlike most diseases on this list, Leptospirosis is caused by bacteria, and some dogs may show no symptoms at all. Leptospirosis can be found worldwide in soil and water. It is a zoonotic disease, meaning that it can be spread from animals to people. When symptoms do appear, they can include fever, vomiting, abdominal pain, diarrhea, loss of appetite, severe weakness and lethargy, stiffness, jaundice, muscle pain, infertility, kidney failure (with or without liver failure). Antibiotics are effective, and the sooner they are given, the better.

Lyme Disease

Unlike the famous “bull’s-eye” rash that people exposed to Lyme disease often spot, no such telltale symptom occurs in dogs. Lyme disease (or borreliosis) is an infectious, tick-borne disease caused by a type of bacteria called a spirochete. Transmitted via ticks, an infected dog often starts limping, his lymph nodes swell, his temperature rises, and he stops eating. The disease can affect his heart, kidney, and joints, among other things, or lead to neurological disorders if left untreated. If diagnosed quickly, a course of antibiotics is extremely helpful, though relapses can occur months or even years later.

Parvovirus

Parvo is a highly contagious virus that affects all dogs, but unvaccinated dogs and puppies less than four months of age are at the most risk to contract it. The virus attacks the gastrointestinal system and creates a loss of appetite, vomiting, fever, and often severe, bloody diarrhea. Extreme dehydration can come on rapidly and kill a dog within 48-to-72 hours, so prompt veterinary attention is crucial. There is no cure, so keeping the dog hydrated and controlling the secondary symptoms can keep him going until his immune system beats the illness.

Rabies

Rabies is a viral disease of mammals that invades the central nervous system, causing headache, anxiety, hallucinations, excessive drooling, fear of water, paralysis, and death. It is most often transmitted through the bite of a rabid animal. Treatment within hours of infection is essential, otherwise, death is highly likely. Most states require a rabies vaccination. Check with your vet about rabies vaccination laws in your area.

Addison’s Disease

Addison’s disease, scientifically known as hypoadrenocorticism, is a disease with serious consequences for dogs, although fortunately with proper treatment, dogs diagnosed with Addison’s disease are expected to have normal lifespans. Addison’s disease occurs when the adrenal glands fail to produce the hormones that they are in charge of in the body.

The most important hormones produced by the adrenal glands are steroids, particularly aldosterone and cortisol. These steroids play a large role in regulating your dog's internal organs and body systems. Without them, your dog's body deteriorates, leading to serious complications and even death.

ALL CONTESTANTS - Please explore the following sites and articles provided by the American Kennel Club:

<https://www.akc.org/expert-advice/sports/get-started-in-dog-sports-and-events/>

<https://www.akc.org/expert-advice/lifestyle/9-tips-finding-working-responsible-breeder/>

<https://www.akc.org/expert-advice/health/how-to-get-fit-with-your-dog/>

<https://www.akc.org/expert-advice/home-living/preparing-new-puppy/>

<https://www.akc.org/expert-advice/nutrition/how-to-read-a-dog-food-label/>

ALL CONTESTANTS – please familiarize yourself with a basic nutrition label found on a bag of dog food and be able to answer the following questions:

- Nutritional Adequacy Statement
- % protein
- % fat
- % fiber
- % water
- Feeding Directions
- Ingredient amounts