



**SOUTH DAKOTA STATE  
UNIVERSITY EXTENSION**



# 2026 Companion Animal Book

**Jillian Calmus** | SDSU Extension 4-H Youth Educator  
**Jen Hayford** | SDSU Extension 4-H Youth Educator



## 1.0 General Information

The Companion Animal State 4-H Show is an opportunity for South Dakota 4-H members to exhibit knowledge about their companion animal.

### 1.1. Sanctioning

- Companion Animal shows at county Achievement Days and at the South Dakota State Fair are not sanctioned by any national organization.

### 1.2. Companion Animal Breeds

- Companion Animals do not need to be purebred animals. They will not be judged for breed characteristics. Companion Animals are judged for physical condition, cleanliness, presentation, temperament, and attractive or unique appearance.

### 1.3. Carriers, Cages, and Kennels

- Exhibitors must provide their own pet carrier or portable kennel to transport and house their Companion Animals while on the fairgrounds and during the show.

## 2.0. Exhibiting Companion Animals

### 2.1. South Dakota 4-H Exhibit Lots

- Cat/Kitten Showmanship
- Companion Animal Live Exhibit
- Companion Animal Display Exhibit

Senior participants will have points deducted if they have assistance with set up.

ELIGIBLE COMPANION ANIMALS: At county Achievement Days, any live companion animal exhibit can be shown with the approval of the 4-H Youth Educator and/or County Fair Board.

All animals are welcome for live exhibits at the State Companion Animal Show; however, animals brought to County events must be approved by county-level 4-H Youth Educators. With the exception of dogs and horses—which must be entered in the dog show and horse show respectively. Reminder: Rabbits and Guinea Pigs/Cavies may be shown only as pets in the Companion Animal Show and cannot be entered in the State 4-H Rabbit/Cavy Show if they have breed disqualifications.

AGE OF LIVE EXHIBIT ANIMALS: All animals must be weaned prior to show. Minimum age requirements for companion animals are as follows:

- Cat/Kittens: 4 months
- Ferrets: 4 months
- Chinchillas: 7 weeks

- Guinea pigs: 4 weeks
- Gerbils, Hamsters, Mice, & Rats: 4 weeks
- Hedgehogs: 5 weeks
- Rabbits: 9 weeks
- Birds: fledgling age

### 2.2. Guidelines for Exhibiting Companion Animals

- Health Certification
  - Each companion animal live exhibit must have a current CVI (health paper). The SD Animal Industry Board requires that all companion animals are accompanied by a health certificate that has been signed by a licensed accredited veterinarian within 30 days of entry to the South Dakota State fairgrounds. Health certificates must indicate the dates of vaccinations received, especially rabies and feline distemper (FVRCP). All vaccines must be current. It is important for 4-H members to consult with their local veterinarian about complete healthcare specific to their companion animal/ pet, which may include additional vaccinations, such as for feline leukemia, etc.
- Animal Possession Requirement
  - Kittens/cats must be in possession of the exhibitor by May 31 of the current year.
- Animal's Length of Stay at Event
  - Companion Animals may only be brought to the State or county fairgrounds on the day of the show.
- Entry Limits
  - Each exhibitor is limited to two entries per lot number. Cat/Kitten Showmanship is limited to one entry.
  - Each animal (cat or companion animal) is limited to **one** lot. Animals may not be entered in multiple lots.
- Control of Animals While Showing
  - Companion Animals may be shown in or out of their cage, except for birds, which must remain in their cage during the show. During Cat/Kitten Showmanship, the animal must be out of its carrier during showmanship and show.
  - Each presenter must bring a carpet square to place on the show table under their companion animal while showing. Carpet squares should be at least 12" x 15" in size.
  - Companion animals must be in control of their owners at all times. A leash and/or harness are required for cats/kittens, and

other species if appropriate, while out of their carrier. Use a small, clean, light-weight leash or harness. Tip: Practice using a leash at home with your pet to get your companion animal comfortable with wearing the leash or harness before the day of the show.

- Care of Companion Animals at the Show
  - Companion animals must have access to clean water. Travel carriers should provide your companion animal with everything it might need, including food and toys.
  - A litter box is optional, however be aware that companion animals may be in their carriers for several hours at the show, so please plan accordingly. It is advisable to feed cats several hours before the time of the show.
- Ribbons and Awards
  - Ribbon placing follows the Danish system of purple, blue, red, and white.
  - Awards for best in show are awarded to the top five exhibitors per lot and division.

### **2.3. Cat/Kitten Showmanship**

Showmanship is a 4-H Youth-in-Action activity. The purpose of showmanship is for 4-H members to develop public presentation skills and showcase their animal handling and knowledge about their pet.

Showmanship provides 4-H members with a meaningful experience to practice and improve their animal handling and showmanship skills. Showmanship gives 4-H members the opportunity to present themselves and their pet to the best of their ability. It is important to remember that 4-H showmanship is not the same as professional showmanship in competitive events for purebred cats.

#### **2.3.1. Your Appearance for 4-H Showmanship**

- You should appear presentable for the show.
- Dress and look nice to show your cat. Be sure that your hands are clean, as the judge will be watching your hands closely as you show the different body parts of your cat.
- Your hair should be nicely combed and tied back, out of your face, if it is long.
- Wear either a 4-H exhibitor's t-shirt, or a white shirt or blouse, with either short or long sleeves.
- Wear closed-toed shoes or boots. No sandals or flip-flops.

#### **2.3.2. Tips for Cat/Kitten Showmanship**

- Relax. Remember, the more relaxed you are while handling your pet, the more calm and relaxed your pet will be. Everyone at the show is there

because they love cats. You will not be criticized by anyone if you forget something, or if your cat gets scared or nervous during the show. Everyone is here because they like cats and want to support you in your Companion Animal project!

- Remember to handle your cat gently but firmly (not too rough or too tight). The entire time you are showing your cat, you can pet or soothe the cat with your hand. The more you practice at home before the show, the more your cat will be comfortable with being handled and shown.
- Remember that this might be a new and scary experience for your cat, too. If your cat scratches, growls, tries to escape, or fidgets, s/he is just being a cat. The judge will only take points away if you react poorly, lose your temper or get rough with your cat. Stay calm and do the best you can. Smile! This is your opportunity to show the judge that you are a proud and capable cat owner.

#### **2.3.3. Procedures for Cat/Kitten Showmanship Approaching the table**

1. Picking up your cat
  - Put one hand under the chest behind its forelegs. Grasp both hind legs and tail with your other hand.
2. Carrying your cat
  - Always carry your cat in the safety carry position. Grasp the cat's forelegs between your thumb and fingers, and have at least one finger between the cat's legs. Support the cat's chest in the palm of your hand. Then, with your opposite hand grasping the nape of the cat's neck, tuck the cat's rump and rear legs both under your elbow and against your body or riding on your hip.

#### **Presenting your cat**

1. Pick up your cat with one hand just behind its front legs and one hand just in front of its back legs. Lift the cat up, stretching it out slightly so that the judge can see how long the cat is.
2. Show the judge the cat's side, then turn and show the cat's head, then turn and show the cat's other side, then turn and show the cat's behind. (Practice this several times so that the cat becomes familiar with being picked up like this, and so you can make the turns in a smooth fashion. Practice with your cat at a steady pace. Make the practice sessions short and more frequent, rather than having long sessions where your cat may start to resist and squirm.)

- Put the cat down on the table facing the judge and lift the front of the cat up by gripping just behind the front legs. Hold your cat up, standing tall with its back legs still on the table so that the judge can look at the cat's belly. Put the cat's front legs back down on the table.

### Examining your cat

- Try to keep your cat turned sideways to the judge as you examine the cat. Most cats will huddle down with their belly on the table. You can gently "tuck" the cat so that it looks like a compact loaf of bread, with paws underneath its body, and tail curled.
  - Identify and show all body parts. The goal of this part of your presentation is to show the judge that you know the parts of a cat's body and what is typical of a healthy cat. One way to remember everything is to look at your cat—starting at the head, comment on each part as you work your way back to the cat's tail.
    - Start at the cat's head. Feel the skull, face, chin, and neck for any lumps or scratches and anything abnormal. Talk to the judge as you do this. Now look at each of the cat's eyes and into each ear. Your cat's eyes should be clear without discharge, and its ears should be clean and free of ear mites, scratches, or discharge. You may say something like, "Now I am checking each eye making sure they are clear and clean; they look clear and bright. I am checking the ears for mites, infection, or scratches. My cat's ears look fine."
    - Continue to talk to the judge as you examine your cat. Tell the judge what you are looking for as you check each body part.
    - Lift the lips on the side of your cat's face to expose its teeth for the judge's inspection. Do not force the cat to open its mouth.
    - Next, examine the cat's entire body. Think of this as giving your cat a massage. As you do this, you are feeling for bones that are not right, for lumps, bumps, or cuts, and any issues with their fur. Tell the judge what you are feeling for as you do this. Start at the neck and work toward the back. Feel under the jaw and neck, shoulders, back, belly, and each leg. Also look at all four paws.
    - Lift the tail and check the cat's backside. You are looking for anything that is not normal—
      - e.g., blood or a dirty bottom—that could indicate diarrhea or illness.
- Comment on your cat's weight. If you can feel the bones easily, the cat is probably too skinny. If you feel lots of rolls of fat and loose skin, the cat could be overweight. A firm body that doesn't feel bony or too loose is ideal for healthy body weight.
  - Brush the fur back on your cat so the judge can see the skin. Comment on the color of the skin and if there is any dry or irritated skin.
  - Do the pinch test to make sure the cat is not dehydrated. To do this, pull or pinch a fold of skin up and watch it return. If the skin moves s-l-o-w-l-y back in place, the cat may be dehydrated.
  - Brush the fur back, then forward into place. Blow on the fur so it fans out from the skin. Comment on the fur. Is the fur soft? Is the cat shedding? Is its hair matted?
  - Put your cat back into the "bread loaf" position—face the cat sideways to the judge, tucked up, legs underneath, and tail curled. Stand straight and tell the judge you are done examining your cat.

### 2.3.4. Responding to Judge's Interview Questions

Learn as much as you can about your cat.

- Study a cat or companion animal curriculum and other resources about your pet (including the body parts diagram contained in this publication).
- Included in this publication is a study guide sheet for each age division (Beginner, Junior, and Senior) the judge may use these questions or ask some of their own.

Here are some questions that the judge might ask you to answer:

- When was your cat born? (the year and time of year)
- How old is your cat?
- Your cat's gender (male or female); has it been spayed or neutered?
- What does your cat eat?
- Any special characteristics (examples: being a good mouser, playful, independent, scared of loud noises, etc.)

#### Beginners

- What are some signs of a healthy cat? (or) How do you know when your cat is sick?
- How many bones does a cat have?

- How long does a mother cat carry the kittens before they are born?
- How many toes are on the front paws of a cat?

### **Juniors**

- What vaccinations does your cat need?
- What are male and female cats called?
- How many calories does your cat or kitten need to eat every day?
- How long does the average cat live?
- What are some characteristics of a “fixed” cat?
- What is special about a cat’s tongue?
- How old does your cat need to be to get a rabies shot?
- What is the first substance a kitten drinks from its mother called?
- Cats can hear how many octaves higher than humans?

### **Seniors**

- What are the symptoms of rabies? (Alternative diseases/maladies that may be asked about: panleukopenia, chlamydia, rhinotracheitis, calicivirus, feline leukemia.)
- What diseases/illnesses does “fixing” your cat either prevent or reduce the chances of?
- What is the flehmen reaction?
- Why is protein and fat important in a cat’s diet?
- What are some signs a female cat is in heat?
- Why are there often kittens of different colors in the same litter?
- What is the normal body temperature of a cat?
- What is the 3rd eyelid on a cat called?

## **2.4 Companion Animal Live Exhibit**

### **2.4.1 Preparing For The Show**

- A CVI is required for all companion animals within the last 30 days. A rabies and Feline Distemper vaccinations are required for cats. Rabies vaccine is required for ferrets.
- Check for external and internal parasites. Animals will not be allowed in the show if they have any parasites or infections present.
- Learn as much as you can about your pet. Where is the species from originally? When/where was it first domesticated? What is the animal’s natural habitat like? What does it eat? What is the best way to care for your animal?
- Prepare your presentation and practice.
  - Start preparing a few weeks before the show.
  - Practice handling your pet so it is comfortable.
  - Ask a parent or friend to ask you questions about your pet to help you practice answering

the judge’s questions.

- Clean your pet’s enclosure as you would routinely, including its travel crate. Make sure to clean the travel cage again before the show.
- Trim your pet’s nails and/or wings as needed. Brush its fur and make sure its paws, bottom, fur, and body are clean and presentable.

### **2.4.2 Preparing Your Presentation**

During the show, each participant will give a short presentation about their pet to the judge. Participants are encouraged to research credible information about their pet including care and characteristics of that species. There will be a 10 minute time limit on presentations.

Here are some ideas about what to include in your presentation:

- Your name, age, and involvement in 4-H.
- The type of pet, species, age, and any other features or characteristics about your pet.
- General background information about your companion animal’s species:
  - Where is your companion animal originally from?
  - What kind of habitat does it naturally live in?
  - What are some characteristics of its natural environment or habitat?
  - What are some of your pet’s natural behaviors? (How does it hunt? Does it need to hibernate? etc.)
  - Does your domesticated pet require any special care (habitat, grooming, food, etc.) to maintain its health and/or natural needs?
- About your pet:
  - How long does your companion animal typically live? How old is your pet?
  - Discuss your pet’s overall appearance, physical features, and health.
  - How do you care for your pet at home?
  - How do you clean its cage? How often?
  - How do you groom or clean your pet?
  - What health treatments does your pet require?
  - What does your pet naturally eat? What kind of food or treats does it like? How much and how often do you feed your pet? Does your pet have any special dietary needs?
  - Anything else that is interesting or special about your pet!
- What did you do to prepare for the Companion Animal Show?

### **2.4.3 Show Procedure**

- Exhibitors and their companion animal(s) should

check in 10 minutes prior to their designated presentation time. Exhibitors that miss the scheduled check-in time will be ineligible to show.

- Animals must be housed in an appropriate cage or carrier, and should remain in their cage at all times during the show unless youth are asked to remove their pet from its enclosure by the judge. If the animal is shown in a travel carrier/cage, then exhibitors must bring photographs of their companion animal's normal habitat (at home) to show the judge.
- Each exhibitor will be asked to give a short showmanship presentation on their companion animal. The characteristics, health, and care of the animal should be provided in this presentation. Following the presentation, exhibitors will be interviewed by the judge on their knowledge of the specific companion animal species and general care of their animal. (see the following section for sample Study Guides) The judge may use these questions or ask some of their own.
- **The judge will evaluate the participant on the following criteria:**
  - **Animal's health and well-being 30 points.**
  - **Cage/habitat evaluation (i.e. photos and description of your pet's normal habitat/ cage at home, and appropriateness of travel cage). 25 points.**
  - **Presenter's overall knowledge of their pet, animal species, and presentation skills 45 points.**
- See 4-H Companion Animal Judging Sheet for more complete breakdown of points available.
- Each participant should bring their companion animal in an adequate travel cage or enclosure, including water (bowl or bottle, as appropriate) and food provided; a carpet square, toys, treats, and other accessories that you will want to show the judge during your presentation; a valid CVI, and pictures of the pet's normal housing/ habitat, if applicable.

## 2.5 Companion Animal Display Exhibit

In place of bringing a live companion animal to the show, exhibitors are also allowed to make a display exhibit and prepare a visual presentation to show their knowledge and care of their companion animal.

**Youth must create a new poster each year and cannot use previous ones.** For example, exhibitors can make a presentation poster with information and

pictures of their companion animal, without needing to bring the animal to the show.

Exhibitors will be asked to give a live presentation to the judge about their display project that should include information about their companion animal.

Judging of all Companion Animal Display Exhibits will take place during the Companion Animal show. Exhibitors must be present at time of judging, and will be judged on the quality of their presentation, display materials, accuracy of the information provided, and ability of the exhibitor to explain the information and answer the judge's questions. Exhibitors should prepare the information they will share in their presentation as if the live animal were present. Refer to the previous section for information on what to include in your presentation.

There will be a 10 minute time limit on presentations.

### 3.0 Video Demonstrations

The following links provide demonstrations on how to show your Companion Animal.

**Video on Companion Animal:**

[youtube.com/watch?v=EI7HJCuorsY](https://youtube.com/watch?v=EI7HJCuorsY)

**Video on Cat Showmanship:**

[youtube.com/watch?v=sK9vi0L7K-s](https://youtube.com/watch?v=sK9vi0L7K-s)

**Video on Companion Animal Displays:**

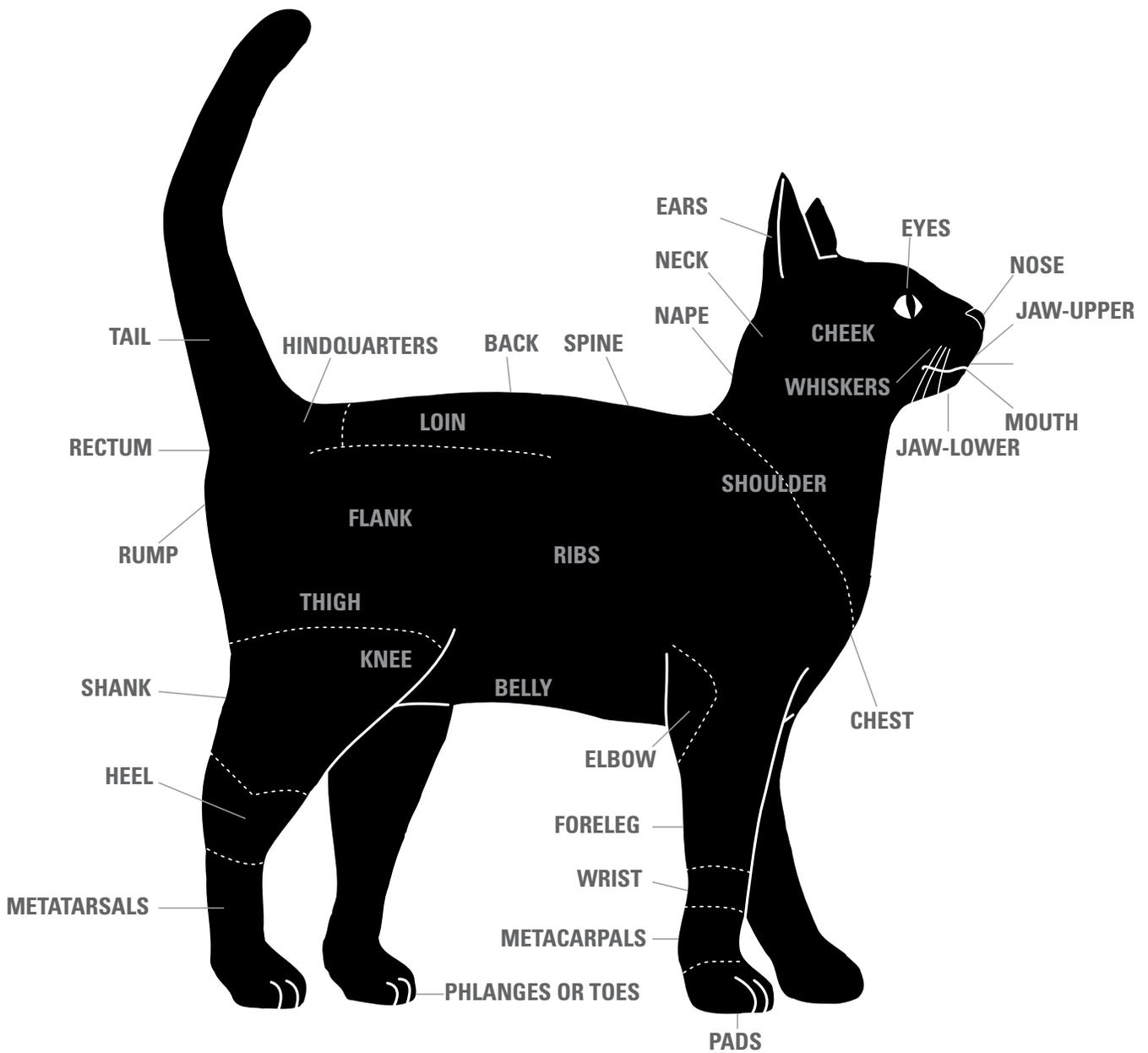
[youtube.com/watch?v=0HABd6tl62c](https://youtube.com/watch?v=0HABd6tl62c)

Extension website with information on the care of companion animals, and careers associated with companion animals: [companion-animals.extension.org/](http://companion-animals.extension.org/)

### 3.1. Cat/Kitten Study Guide

#### 3.1.1 Parts of a Cat

It is important to know the names of the parts of a cat's body. This is helpful in telling your parents or veterinarian how your cat is feeling or behaving. Below is a diagram of a cat's body parts that you should know.



### 3.1.2. Cat/Kitten Study Guide for Beginners (Ages 8-10)

#### Health

- A cat needs current vaccinations every year, as recommended by your veterinarian.
- If you do not want to have kittens, a cat must be neutered or spayed.
  - A female cat is spayed (the uterus and ovaries are removed)
  - A male cat is neutered/castrated (the testicles are removed)
- A healthy cat has the following qualities and characteristics:
  - has bright, clean eyes
  - has a glossy coat
  - has a clean nose
  - has a good appetite
  - has a nice pink tongue and gums
  - is curious and playful
  - uses a litter box daily

#### Physical Characteristics

- A cat stands on the tips of its toes (like a ballerina).
- The whiskers are used to help sense things.
- Cats can live as long as 20 years with proper care and nutrition.
- Cats have 244 bones.
- Shedding is when a cat sheds its coat in the spring and the fall—it is renewing its coat for the season change.

#### Nutrition

- Milk can cause diarrhea, so give only in very small amounts as a treat, not as a regular part of the diet.
- Use common sense for food amounts. If your cat is heavy, feed less. If your cat is too thin, feed more.
- Do not feed dog food to your cat (dog food does not contain enough fat).
- Occasional use of table scraps is OK, but do not use every day, and use in small amounts.
- Best food combination is a dry cat food with small amounts of canned cat food – or dry food alone.

#### Reproduction

- A female cat carries kittens for about 2 months before they are born.
- Kittens open their eyes 9 or 10 days after birth.

### 3.1.3. Cat/Kitten Study Guide for Juniors (Ages 10-13)

#### Health

- A cat needs current vaccinations every year as recommended by your veterinarian. Ask your veterinarian about these vaccines:
  - rabies
  - panleukopenia (pan-luke-o-pea-nee-a)
  - chlamydia (cla-media)
  - rhinotracheitis (rhino-tra-key-mee-ya)
  - calicivirus (ca-lee-che-virus)
  - feline leukemia (feline lou-key-mee-ya)
- Signs that your cat may be sick:
  - It is hiding.
  - It is unresponsive, not playful, and/or not curious.
  - It has dull, mattery eyes
  - Its coat is dry and coarse or matted.
  - It has an increased or decreased appetite.
  - Its litter box habits have changed, or it is making frequent trips to the litter box.
  - Its gums and/or tongue are pale or whitish.
  - It is crying or howling.
  - It has diarrhea.
- A neutered or “fixed” cat is
  - less likely to wander,
  - less likely to get into fights,
  - healthier,
  - quieter (less yowling).

#### Physical Characteristics

- The average cat lives 12–15 human years.
- A cat ages differently from a human. There is no accurate way to calculate age, however, an approximate way to figure the age of a cat (compared to you, a human) is to figure that a cat is about 15 human years old at the end of its first year, nine more years at the end of its second year. Every year thereafter it ages an average of 4 years. For example:

For a 7-year-old cat	First year =	15 years
	Second year =	9 years
	Next 5 years (5 x 4) =	20 years
	Total	44 years
- Whiskers supplement the vision and hearing of a cat by helping sense the width of openings and changes in the environment.
- The teeth are designed for biting and tearing food, not for chewing.
- The tongue is specialized. It is made to hold prey, lick meat from bones, and can curl for lapping up liquids.

- A cat has very good hearing. It can hear sounds two octaves higher than humans.
- Cats have a good sense of smell. A cat's brain center for smell is large.

### **Nutrition**

- An average size cat needs about 1-1 ½ cups of water a day. They like it best when it is clean and cool in a glass or ceramic dish and in a separate place from the food.
- Most pet cats do not get enough exercise, so diet (type and amount) is very important to maintain the best weight.
- Kittens need about 400–500 calories per day.
- Adult cats need about 350 calories per day to maintain a good weight.
- It is important to read the labels on the cat food to make sure your cat is getting the right nutrients.
- A cat has kittens in 63-65 days.

### **Reproduction**

- A queen is a mother cat; she has a litter of kittens.
- A tom is a father cat.
- To identify the sex of a kitten, look under its tail:
  - The backside of a female will look like an "i" (a hole and a slit).
  - The backside of a male will look like a ":" (two holes).
- Fixed cats are healthier because the body concentrates on staying healthy instead of reproduction. Also, there is nearly a zero chance of developing certain health problems, such as cancers of the reproductive system.

### **3.1.4. Cat/Kitten Study Guide for Seniors (Ages 14-18)**

#### **Health**

- Rabies is a viral disease of the nervous system; the disease is passed from mammal to mammal (usually from skunks) and it is always fatal within 7-10 days. Signs are a change in attitude, irritability, erratic behavior, excessive salivation, uncoordinated muscle movements, and weakness—which leads to paralysis. Rabies can be passed to humans.
  - The rabies vaccine should be administered annually to all cats. Rabies vaccine can be given at 12 weeks of age.
- Panleukopenia, or cat distemper, is a viral infection of the digestive system. It is almost always fatal. Signs are diarrhea, vomiting, weight loss, fever, and depression.

- Chlamydia is a serious upper respiratory infection. Symptoms include red, mattery eyes, sneezing, and nasal discharge.
- Calicivirus is a viral infection that leads to upper-respiratory diseases. Signs include sneezing, red, mattery eyes, discharge from the mouth, coughing, fever, weight loss, and a runny nose.
- Rhinotracheitis is an acute infection of the respiratory tract and eyes, often leading to blindness. Symptoms include sneezing, red, mattery eyes, fever, weight loss, and a runny nose.
- Feline leukemia is a contagious virus that shows itself as a wasting disease. Feline leukemia eventually kills the cat's resistance to antibiotics, infections, and tumors. An infected cat may have wounds that do not heal.
- Normal cat temperature is 101–102 degrees F.

### **Physical characteristics**

- Cats mark territory in the following ways:
  - Un-neutered males will back up and spray urine (called spraying).
  - By scratching things.
  - By rubbing their head and nose against something.
- Scratching is also used to sharpen the claws.
- Rubbing their head and nose against someone is also sign of affection.
- Cat's eyes have a third eyelid called the nictitating membrane—a pale, skin-like structure inside the inner corner of each eye whose purpose it is to remove dirt and debris by automatically sweeping across the eye when the eyelid is shut.
- The erect earflap of the ear is called the pinna. It catches sound waves and funnels them to the eardrums. Pinna are flexible, point forward, and can move sideways and back.
- The Jacobson's organ is a small pouch at the back of the roof of the mouth that is lined with receptor cells. It is used to detect smells.
- When a cat holds its mouth half open it is called flehmen response; the cat is identifying smells with its Jacobson's organ.
- A cat has a double set of vocal cords and can make 75–100 different sounds.
- Cats sweat, but not like humans. They have sweat glands located on their: paw pads, lips, chin and anus. Sweating is not a significant way for cats to regulate body temperature.
- Primary ways to cool a cat down: panting, grooming, shade, and stretching out.
- A cat's body should have good balance. Balance

refers to the body conformation. It includes the body type, head type, bone structure, facial type, coat length and types, colors and patterns, and other physical features. Balance and proportion are of greater importance than any single physical feature of your cat.

### ***Nutrition***

- Protein is required for proper growth, for regulating body systems, for heat, and for energy.
  - Kittens need 30-40% of their diet from protein-rich foods
  - Adult cats need 26-30% of their diet to be protein
- Carbohydrates are needed to provide energy.
  - Cats are obligate carnivores, meaning they primarily require protein fats to thrive.
  - Carbohydrates should make up a very small portion of their diet, 10-20%.
- Fats are a source of heat and energy, improve skin condition, tone the nervous system, and are important for resisting disease.
  - Kittens need 25–30% of their diet to be fats. (Fat are an excellent source of calories for kittens.)
  - Adult cats need 20% of their diet to be fats.
  - A low-fat diet for a healthy cat can lead to decreased resistance to disease and dry, scaly skin.

### ***Reproduction***

- A newborn kitten weighs about one-fourth of a pound.
- The first substance a kitten drinks from its mother is called colostrum. Colostrum provides immunity against disease until the kitten can build its own resistances. The mother produces colostrum for 2–3 days and then begins producing regular milk.
- A queen will go through a heat cycle (when it is receptive to mating), which lasts 7–10 days. Symptoms of a cat in heat:
  - Calls or yowls loudly.
  - Rubs against everything.
  - Its vulva becomes enlarged and reddens.
- A queen can mate with several different toms during its heat. A kitten will look like its father, which can result in several different colored kittens in one litter.
- When a tom senses a queen is in heat, he will be increasingly belligerent and aggressive.
- A tomcat penis has small papillae (barbs), which ensure that the mating will be successful. The barbs cause the queen to release her eggs.

- Neutered males have a decreased risk of prostate problems and cancers and no risk of testicular cancer or other testicular problems.
- Spayed females have a decreased risk of breast cancer and no risk of ovarian and uterine cancers or other ovarian/uterine problems.
- Kittens can be fixed as young as 6 months old. Young kittens recover quickly.

### 3.2 Companion Animal Study Guides

The following information is included to help guide further research about your companion animal species. Below are examples of questions that youth should be able to answer or that the judge could ask:

#### 3.2.1 Guinea Pigs

##### Beginner

- What is a female guinea pig called? *Sow*
- What is a male guinea pig called? *Boar*
- What is a baby guinea pig called? *Pup or piglet*
- What is a group of guinea pigs called? *Colony, herd or pack*
- Name one grooming/care task needed for guinea pigs, rabbits, rats and mice? *Nail trimming or teeth trimming*

##### Junior

- How many toes are in the front and back on a guinea pig? *Front (4), Back (3)*
- What is one name for a group of guinea pigs? *Colony, herd or pack*
- What is the minimum cage size for a guinea pig? *12" x 12" x 12"*
- Gestation length for guinea pigs? *60 days*
- Why should you not house guinea pigs with rabbits or dogs? *Dogs and rabbits carry Bordetella*
- What kind of fermenters are guinea pigs and rabbits? *Hindgut fermenters*

##### Senior

- What must be supplemented in a guinea pig's diet as they can't synthesize it like other animals? *Vitamin C*
- What are some sources of Vitamin C for guinea pigs? *Water additives, oranges, cabbage, kale*
- What does the term precocial mean? *Animal whose young are born in an advanced state (look like they are adults) with eyes and ears open, able to walk, and able to eat hard food.*
- Which animal species have precocial young? *Guinea pigs (cavies) and Chinchillas*
- What does the term coprophagy mean? *Eating of feces (fecal material)*
- What is the estrous (reproductive) cycle of a guinea pig? *15 days*

#### 3.2.2. Rabbits

##### Beginner

- What is a female rabbit called? *Doe*
- What is a male rabbit called? *Buck*
- What is a baby rabbit called? *Kit*

- Name one grooming/care task needed for guinea pigs, rabbits, rats and mice? *Nail trimming or teeth trimming*

##### Junior

- Gestation length for rabbits? *30 days*
- What kind of teeth do rabbits have? *Hypsodont*
- What do we mean when we say teeth are Hypsodont? *Teeth that are always growing*
- What are the large breeds (Flemish giants, New Zealand's) used for? *Meat and fur*
- What kind of fermenters are rabbits? *Hindgut fermenters*

##### Senior

- Why shouldn't you touch newborn kits (baby rabbits) within the first week? *The mother may sense you and disown them*
- What is special about a rabbit's estrous cycle? *They are induced ovulators*
- Where does most fermentation take place in the rabbit? *Cecum*
- Rabbits are obligate nasal breathers, what does this mean? *They can't breathe through their mouth; they breathe only their nose*

#### 3.2.3 Rats, Mice, Hedgehogs, and Ferrets

##### Beginner

- Name one grooming/care task needed for guinea pigs, rabbits, rats and mice? *Nail trimming or teeth trimming*
- What is a baby Rat/Mouse called? *Pup*
- Which sex typically has a longer tail, a male or female rat/mouse? *Male*
- What type of bedding can never be used with rats/mice? *Cedar shavings*
- Are hedgehogs considered Carnivores, Herbivores, Omnivores, or Insectivores? *Insectivores*
- What do you call a male ferret? *Hob*
- What do you call a female ferret? *Jill*

##### Junior

- What do you call a group of rats? *Mischief*
- What do you call a group of mice? *Gang*
- What is the typical lifespan of a rat? *2 to 4 years*
- What is the typical lifespan of a mouse? *1 to 3 years*
- Gestation length for rats? *21 to 23 days*
- Gestation length for mice? *19 to 21 days*
- How many rats are typically in a litter? *3 to 18 pups*
- How many mice are typically in a litter? *8 to 12 pups*

- What teeth are Hypsodont in mice and rats? *Incisors*
- What teeth are Brachyodont in mice and rats? *Molars*
- What do we mean when we say teeth are Brachyodont? *Permanent and eventually stop growing*
- Name one of the two functions of tails in rats and mice? *Balance and Thermoregulation (regulating their body temperature)*
- What part of the digestive system is not seen in rats/mice? *Gall bladder*
- What is the name of the breed society that oversees rats/mice (AFRMA)? *American Fancy Rat and Mouse Association*
- What makes up the quills of a hedgehog? *Modified hairs that are hard on the outside and hollow on the inside*
- What is the typical lifespan of ferrets? *7 to 9 years*
- What is the gestation length of ferrets? *40 days*

#### Senior

- What is the estrous cycle of mice and rats? *5 days*
- What is the special name for lacrimal glands in rats and mice? *Harderian glands*
- Where are the Harderian glands located in rats and mice? *Medial canthus*
- What is the name of the secretion from the Harderian glands that creates “red tears” in rats and mice? *Porphyrin*
- What does the term altricial mean? *Refers to animals whose young are born in an under-developed state and are “helpless” on their own, they require a lot of care and feeding from parents to survive.*
- What are some species that give birth to altricial young? *Mice, rats, hamsters, gerbils, ferrets, and rabbits*
- What is the most common disease seen with hedgehogs? *Wobbly Hedgehog Syndrome*
- What kind of ovulators are ferrets? *Induced ovulators*
- A ferret’s diets should be high in \_\_\_\_; high in \_\_\_\_; and low in \_\_\_\_.  
*High in protein; high in fat; low in fiber*

### 3.2.4. Birds

#### Beginner

- A bird’s skeleton is made up of pneumatic bones what does that term mean? *Air-filled*
- Where does a bird store it’s food? *Crop*
- How many components make up a birds fecal (poop) matter? *Three (3)*
- There are 3 signs of a bird who is sick, name one. *“Fluffing”; “tail bob”; and open-beak breathing*
- How long does your average house hold bird live? *5 to 7 years*
- What do birds lack in their respiratory (airway) system? *A diaphragm*
- How do you know how short you can clip a bird’s nails? *The quick*
- Why would you “clip” a bird’s wings? *To prevent flying away*

#### Junior

- How many orders of birds are there? *27*
- What are the different stages in a bird’s lifespan? *Hatchling, Nestling, Chick, Fledgling, Juvenile, Immature (sub-adult), and Adult*
- How many cervical vertebrae do birds have? *8-25 (depending on size)*
- What is the normal range of body temperature for birds? *104 to 112°F*
- What is the purpose of air sacs in a bird’s respiratory system? *Store and warm the air*
- What is the purpose of the crop in birds? *Food storage*
- When you “clip” a birds wings, what wings do you clip? *The primary feathers*
- What are the 3 things avian droppings are composed of? *Feces, urates, urine*

#### Senior

- What disease in birds is highly contagious? *Polyoma*
- When do smaller birds (parakeets, cockatiels) reach sexual maturity? *6 months*
- When do larger birds (parrots, macaws) reach sexual maturity? *3 years*
- What is special about a bird’s cardiovascular system? *Renal-portal system*
- Where is the uropygial (preen) gland located? *Base of the tail*
- What is the normal respiration rate for birds? *14-40 bpm*
- What is the normal heart rate for birds? *125-200 bpm*
- What order do flightless birds belong to? (ostriches, emus, kiwi) *Ratites*

- What Class do birds belong to? *Aves*
- What does the term “blood feathers” mean?  
*Hemorrhage of a developing feather*
- What is another name for crop stasis? *Sour crop*

### 3.2.5. Reptiles and Amphibians

#### **Beginner**

- What do you call amphibians without feet? *Apoda*
- What do you call amphibians with tails? *Caudata*
- What do you call amphibians without tails? *Anura*
- What reptiles shed their skin in one piece?  
*Snakes*

#### **Junior**

- Name one way to provide a heat source for reptiles and amphibians?  
*UV lights, hot rocks, or under-tank heaters*
- What are the 3 climate categories for amphibians and reptiles? *Tropical, Temperate, and Desert*
- What does the term Ecdysis mean? *Shedding*
- What does the term Dyecdysis mean?  
*Improper/difficult shedding*
- What does ETR stand for when talking about amphibians and reptiles?  
*Environmental Temperature Range*

#### **Senior**

- Why is UV light needed by reptiles and amphibians? *For Vitamin D3 synthesis*
- What does the term Chelonians mean when talking about amphibians and reptiles?  
*Animals with a shell*
- Name one of the three Chelonians?  
*Turtles, terrapins or tortoises*
- What is the humidity range for amphibians and reptiles whose climate of origin is “Tropical?”  
*80% to 95% humidity*
- What is the humidity range for amphibians and reptiles whose climate of origin is “Temperate?”  
*60% to 70% humidity*
- What is the humidity range for amphibians and reptiles whose climate of origin is “Desert?”  
*40% to 50% humidity*