

CADETTE ANIMAL HELPERS BADGE – MEETING 1

Badge Purpose: When you’ve earned this badge, you’ll know how animals help humans, and how to help them keep it up.

Activity Plan Length: 1 hour

Time	Activity	Materials Needed
10 minutes	Getting Started <ul style="list-style-type: none"> Begin the meeting by reciting the Girl Scout Promise + Law. 	<input type="checkbox"/> (Optional) Girl Scout Promise and Law poster
15 minutes	The Evolution of Dogs <ul style="list-style-type: none"> Look into the domestication of dogs, and how dogs communicate with humans. 	<input type="checkbox"/> Tablet or computer with internet access
15 minutes	Rats! <ul style="list-style-type: none"> Learn about rats that detect landmines. 	<input type="checkbox"/> Tablet or computer with internet access
20 minutes	The Nose Knows <ul style="list-style-type: none"> Explore the science of smell, and put your nose to the test. 	<input type="checkbox"/> Small plastic containers with lids (i.e. film canisters, Tupperware, take-out containers, etc.) <input type="checkbox"/> Nail or sharp object <input type="checkbox"/> Permanent marker <input type="checkbox"/> Tape <input type="checkbox"/> Cotton balls <input type="checkbox"/> Variety of scents (like peppermint oil, maple syrup, lemon juice, vanilla extract, garlic or onion powder, herbs and/or spices; vinegar; coffee beans, etc.) <input type="checkbox"/> Writing utensils <input type="checkbox"/> Scratch paper
10 minutes	Snack Chat <ul style="list-style-type: none"> Discuss the many ways animals enrich our lives while having a healthy snack. 	<input type="checkbox"/> Healthy snack
5 minutes	Wrapping Up	<input type="checkbox"/> (Optional) Make New Friends lyrics poster



Getting Started

Time: 10 minutes

Materials Needed: (Optional) Girl Scout Promise and Law poster

Welcome everyone to the meeting, recite the Girl Scout Promise and Law.

Activity #1: The Evolution of Dogs

Time: 15 minutes

Badge Connection: Step 1 – Explore the connection between humans and animals

Materials Needed: Tablet or computer with internet access

1. Do you have a dog at home? Do you know the origin story of dogs? Scientists believe that dogs descended from wolves around 30,000 years ago, and evolved alongside humans.
2. Watch a short video about the domestication of dogs: bit.ly/originofdogs
3. Because we evolved together, dogs have become very good at communicating with us; they can read our emotions, understand our tone of voice, and respond to our commands.
4. Would you say that you're proficient in "dog speak"? Dogs give us a lot of clues as to how they're feeling—just like humans, their body language changes depending on if they're happy, excited, nervous, tired, or angry. Being able to understand "dog speak" is important so that we can make sure our dogs are happy, but "dog speak" also keeps us safe when we're around dogs. Remember that while dogs have been domesticated and we now see them as sweet, cuddly pets, they're still animals with animal instincts.
5. As a group, review some basics of canine communication: doggonessafe.com/dog_detective.
6. Then, take a quiz to see how fluent you are in "dog speak": mnn.com/family/pets/quiz/how-fluent-are-you-in-dog-speak
7. Compare your quiz results as a group. How did everyone do? What did you learn to watch for when you're trying to get a good "read" on a dog's feelings and thoughts?

Activity #2: Rats!

Time: 15 minutes

Badge Connection: Step 2 – Find out how animals help keep people safe

Materials Needed: Tablet or computer with internet access

1. What comes to mind when you think about animals who use their noses to keep people safe? Most likely, you'll think of dogs (i.e. bomb sniffing and search and rescue dogs).
2. Have you ever heard of rats that can detect landmines? African giant pouched rats, also known as Gambian pouched rats, have very keen senses of smell. They're trained to sniff out landmines in former battlefields in countries like Mozambique and Cambodia. Because many of these landmines are made of plastic, it's hard for human beings to detect them (other landmines can be found with metal detectors). The rats are small enough that they can work quickly and without fear of setting off undetected landmines.
3. Watch a video of these amazing rats at work: bit.ly/landminesniffingrats

Activity #3: The Nose Knows

Time: 20 minutes

Badge Connection: Step 2 – Find out how animals help keep people safe

Materials Needed: Small plastic containers with lids (i.e. film canisters, Tupperware, take-out containers, etc.); nail or sharp object; permanent marker; tape; cotton balls; variety of scents (like peppermint oil, maple syrup, lemon juice, vanilla extract, garlic or onion powder; herbs and/or spices; vinegar; coffee beans); writing utensils; paper



1. Many animals rely on their sense of smell to help them navigate the world. How do you think your sense of smell compares to a dog's?
2. Smells (or odors) are made up of tiny molecules of chemicals that are invisible to the naked eye. Many of the smells you're familiar with aren't just single molecules—they're made up of a mixture of them. These chemicals float through the air and into your nose.
3. Humans have up to five million scent receptors, but dogs can have as many as 300 million (this varies depending on the breed)! Dogs have a much larger area of nasal membrane than humans—that means they collect a lot more information about their environment, people, and other animals just based on different smells.
4. Alexandra Horowitz, a professor at Barnard College who researches dog cognition (what dogs know and how they think), compares our sense of smell to a dog's sense of smell like this: "While we might notice if our coffee had a teaspoon of sugar added to it, a dog could detect a teaspoon of sugar in a million gallons of water—that's two Olympic-sized pools' worth of water."
5. Try a little experiment to test just how good your sense of smell is!
 - Put a cotton ball in the bottom of each container.
 - Use a nail to carefully poke a few holes in the lid of each container. (If you don't want to pierce the lids, you can skip this step and just open and close the lids). Use a piece of tape to mark each container with a number. Write down the number and scent on a sheet of paper—this will be your master answer key.
 - Right before you're going to conduct your experiment, place a few drops of each odor into each separate container.
 - Hand out paper and pen to each girl. Optional: Hand out blindfolds too if everyone wants to use them.
 - Pass out the bottles and have everyone try to guess what scent is in each container. Write down your answers on your piece of paper. Be sure to number your answers accordingly.
 - After everyone has had a chance to guess each scent, review your answers. How was the experiment? Was it easier or harder than you thought to identify the scents?

Activity #4: Snack Chat

Time: 10 minutes

Badge Connection: Questions link to multiple badge steps

Materials Needed: Healthy snack

1. While having a healthy snack, discuss the many ways that animals enrich our lives:
 - How many of you have pets at home? What kind of pet(s) do you have?
 - What do you like about sharing your home with an animal/animals?
 - For those of you who have dogs, how could you use what you learned today to enrich your relationship with your dog?
 - We've talked a bit about how animals make our lives better—what are some ways we can make the world a better place for animals?

Wrapping Up

Time: 5 minutes

Materials Needed: (Optional) Make New Friends song lyrics poster

Close the meeting by singing Make New Friends and doing a friendship circle.

More to Explore



- Field Trip Ideas:
 - Visit an equine center that provides animal assisted therapy to learn about the different ways horses help people with physical and emotional disabilities.
 - Visit a nature center or zoo to explore learn more about the domestication of cats and dogs.
- Speaker Ideas:
 - Ask a dog trainer to come to your meeting and talk about human-canine communication.
 - Invite a police officer or firefighter to talk about how dogs assist them with their jobs.

