

Science Experiments with Your Dog



Experiment 1 – Right-Pawed or Left-Pawed

You can usually tell at a very early age if a child is right-handed or left-handed by which hand they use the most frequently. What about your dog? Have you ever wondered if he or she has a more dominant paw? We're going to use the **scientific method** to try to find out!

Materials:

- Your dog 😊
- Treats

Hypothesis: (what do you predict will happen?)

I predict that my dog is _____ (right-pawed or left-pawed)

Procedure:

1. Have a bag of your dog's treats ready.
2. Have your dog sit in front of you.
3. Hold one treat in each hand. (If you only put a treat in only one hand, your dog might use the paw closest to the treated hand to get you to release it)
4. Hold your hands closed in front of you. After the dog smells the treats, he or she may try to paw at your hands to get you to release the treat.
5. Note which paw your dog uses first. Write it down in this chart under trial 1:

Trial	Paw (left or right)	Trial	Paw (left or right)
1		6	
2		7	
3		8	
4		9	
5		10	

6. Repeat these steps a few times with at least a minute in between each trial. ****It is important to use the same type of treat for each trial.**** Let the dog eat the treats after each trial!
7. See if you notice a pattern!



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Results:

Number of times dog used his/her right paw first: _____

Number of times dog used his/her left paw first: _____

Conclusion:

Was your hypothesis correct? Explain.

Do you think your dog is right-pawed, left-pawed, or neither? Explain.

What other ways can you think of to test if your dog is right-pawed or left-pawed?

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Experiment 2 – What Color?

What is your favorite color? Maybe you have more than one favorite!

There is a lot of research (see resources section) to suggest that while dogs are not color blind as many people thought in the past, they don't see colors in the same way we do. They might only see shades of yellow, blue, and violet. No matter how they see different colors, is it possible they have a preference? We will again use the **scientific method** to try to find out!

Materials:

- Your dog 😊
- Treats
- Different colored bowls or plates

Hypothesis: (what do you predict will happen?)

I predict that my dog _____ (will or won't) prefer a particular color.

Procedure:

1. Choose 4 different-colored dishes, plates, or bowls.
2. Without allowing your dog to see, lay out the 4 bowls all in a row, each with the same treat inside ****It is important to use the same type of treat in each bowl so your dog doesn't just go for his/her favorite treat or for a particular scent.****
3. Give your dog access to the bowls. Observe which bowl he/she goes to first to get the treat. Write it down in this chart under trial 1:

Trial	Color
1	
2	
3	
4	
5	
6	
7	
8	

4. Repeat these steps with at least a minute in between each trial. If possible, change what order the colors are in each time.
5. See if you notice any patterns!

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Results:

Write down the number of times your dog went for each color bowl first:

Was there anything else you noticed? (for example, did your dog always go for the bowl on the far left, no matter what color it was?)

Conclusion:

Was your hypothesis correct? Explain.

Do you think your dog preferred a particular color? Explain.

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What other ways can you think of to test if your dog prefers any colors?

Resources:

Information on right-pawed or left-pawed:

<https://thebark.com/content/your-dog-southpaw>

<https://www.akc.org/expert-advice/lifestyle/dog-right-or-left-pawed/>

<https://www.carlsonanimalhospitals.com/blog/2018/08/right-pawed-or-left-pawed-which-is-your-pets-preference/>

Information on how dogs see color:

<https://www.akc.org/expert-advice/health/are-dogs-color-blind/>

<https://dogtime.com/dog-health/general/5183-dogs-colorblind-staff-faq>

<https://www.dogster.com/dog-health-care/are-dogs-colorblind-a-guide-to-what-your-dog-sees>