

From Wolf to Dog

Tens of thousands of years ago, certain wolves went through a process called domestication and as a result, we now have dogs.

Domestication is when species of plant or animal has been adapted by humans to help us. It also means the species now relies on humans to survive.

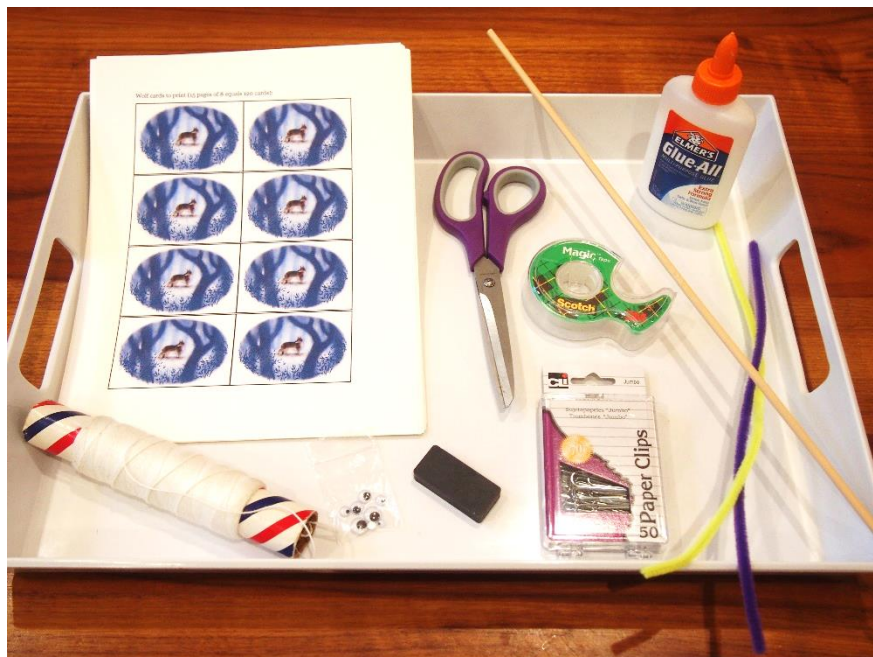
Domestication is not as simple as taking one animal from the wild and raising it with humans. It takes generations to have real changes happen in a species—both in their body and their behavior.

The first thing people probably looked for in an animal they'd live with was how friendly the animal could be toward humans. If an animal would attack or run away from people, they were not going to be a great fit.

Try this classroom demonstration to better understand the process!

The materials:

- 40 Paperclips
- 120 Wolf Cards (printable page included in this activity guide)
- Printer paper or cardstock
- Scissors
- Tape
- Plain magnet, at least 1.5 inches in length
- Fishing line or string, tied to a stick or pole
- Optional: Googly eyes, glue, and pipe cleaners
- Optional: Wide basin, tray, or box



Directions

Prepare ahead of time:

Print 120 wolf cards and cut them out. The printable page in this document has 8 cards, so 15 pages will be the right number to print. Tip: print on cardstock for more durable cards! Regular paper is fine, as well, if that is what is available.

Add a paperclip to 40 of them. Separate them into four groups of 30 cards.

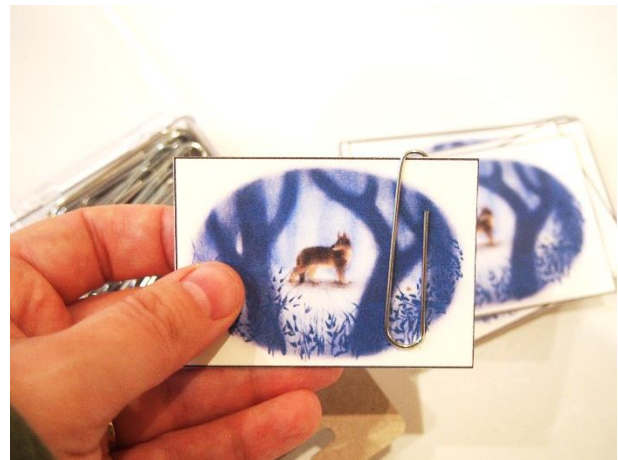
Group 1: 1 paperclipped card, 29 regular

Group 2: 3 paperclipped cards, 27 regular

Group 3: 9 paperclipped cards, 21 regular

Group 4: 27 paperclipped cards, 3 regular

If you would prefer to hide which cards may be magnetic, feel free to tape the paperclips to the back of the cards rather than hook them onto the cards in the usual way.



The magnet will represent the human in this demonstration. Feel free to add googly eyes and/or pipe cleaners to make arms and legs! (Decorating is optional, of course!)



Tie the magnet to a string or fishing line, attached to a stick or pole.



Hint: Tape the back of the string so the magnet hangs vertically, like so:



Step 1:

Introduce the idea of domestication to the participants. Feel free to read from the start of this document or read from the back matter of *This Wolf Was Different*. Other tips: see how many of your participants have pets or other domestic animals at home! Challenge them to think of ways those animals act or look different than wild animals.

Step 2:

Hold up a wolf card and explain that this card will represent a prehistoric wolf. Hold up the magnet and explain that this magnet will represent a prehistoric person. For domestication of dogs to happen, people would have needed to find wolves that were not afraid of, and even friendly toward, humans. They may have done this by accident or on purpose!

Let's model this! We are going to find out which wolves will come to this magnet person!

Step 3:

Set out Group 1 of the cards. These can go in a broad basin, box, tray, or even on the top of a classroom table or the floor.

Call up a volunteer to hold the fishing rod (or stick with a string). Have them try to connect their human with the wolves. Do any of them stay with the human?

Step 4:

Success! One wolf was willing to come to the human! This wolf may have had extra food and protection in life, by staying near human camps. Humans may have shared their food and the safety of their fires at night.

If this wolf had babies, they would have a chance of being like their parent—not as afraid of humans. Let's see what the next generation of wolves was like in this area!





Step 5:

Set out Group 2 of the cards. Call another volunteer to “fish” for the wolves! This time, they will find 3 wolves. Ask the participants why they think there was more this round!

Once again, the wolves who have less fear of humans may have an advantage over the other wolves. They may have more success in surviving to have families! Let’s see how this impacts the next generation.

Step 6:

Set out Group 3 of the cards. Call another volunteer to “fish” for the wolves! This time, they will find 9 wolves. By now the participants should be catching on! Repeat one final time.



Step 7:

Set out Group 4 of the cards. Call another volunteer to “fish” for the wolves! This time, it should be overwhelming. 27 out of the 30 wolf cards will attract to the magnet.

Step 8:

Now we can see how something as simple as being less afraid of humans could change a whole group of wolves over time! Explain that this process would have taken longer in real life, but this is a model. Remind participants that

this didn't change all the wolves in the world, just a small group. After all, we still have wolves today! They did not all turn into dogs!

Ask participants what they think would happen if people picked another trait they liked in wild wolves, other than friendliness. For example, what if people preferred wolves that wagged their tails more?

What other changes have happened to wolves because they began a partnership with humans?

What changes have happened to humans because our species has a partnership with dogs?



Alternate version:

Rather than a demonstration, run as a full classroom activity!

This activity is designed to take a week (5 days) to complete. Each day, the activity will last 5-15 minutes. It is recommended to read *This Wolf Was Different* at the start of the week so students are prepared to think about the activity!

The materials:

- 60 Paperclips
- 60 Wolf Cards (printable page included in this activity guide)
- Printer paper or cardstock
- Tape
- Scissors
- Enough magnets for every student in the class
- Optional: Googly eyes, glue, and pipe cleaners

Directions

Prepare ahead of time:

Print 60 wolf cards and cut them out. The printable page in this document has 8 cards, so 8 pages will be the right number to print. Cardstock is highly recommended to help the cards survive the week!

Test the student magnets ahead of time to make sure they are strong enough to attract a paperclip.

For Day 1, tape a paperclip to the back of 1 of the 60 cards. Hide all 60 cards around the room.

For Day 2, tape a paperclip to the back of 3 of the 60 cards. Hide all 60 cards around the room.

For Day 3, take a paperclip to the back of 9 of the 60 cards. Hide all 60 cards around the room.

For Day 4, tape a paperclip to 27 of the 60 cards. Hide all 60 cards around the room.

For Day 5, tape a paperclip to all 60 cards. Hide all 60 cards around the room.

DAY 1:

Introduce the idea of domestication to the participants. Feel free to read from the start of this document or read from the back matter of *This Wolf Was Different*. Other tips: see how many of your participants have pets or other domestic animals at home! Challenge them to think of ways those animals act or look different than wild animals.

Give each student a magnet. (Optional: have them personalize their magnet by attaching googly eyes or other decorations.) This will represent a human!

Hold up a wolf card and explain that this card will represent a prehistoric wolf. For domestication of dogs to happen, people would have needed to find wolves that were not afraid of, and even friendly toward, humans. They may have done this by accident or on purpose!

Let's model this! We are going to find out which wolves will come to your magnet humans!

Have the students explore the classroom with their magnets, testing them with the wolf cards they find. Instruct them to bring you any wolf they find that attracts to their magnet.

On Day 1, this will just be one wolf!

Success! One wolf was willing to come to the human! This wolf may have had extra food and protection in life, by staying near human camps. Humans may have shared their food and the safety of their fires at night.



If this wolf had babies, they would have a chance of being like their parent—not as afraid of humans. We’ll see what the next generation of wolves was like in this area when we try again tomorrow!

Day 2:

After pre-hiding the cards once more, have the students take their magnets and go searching again for wolves that are willing to come to their model human magnets.

This time, there will be 3! Ask the participants why they think there was more this round.

Once again, the wolves who have less fear of humans may have an advantage over the other wolves. They may have more success in surviving to have families! Let’s see how this impacts the next generation in tomorrow’s test.

Day 3:

After pre-hiding the cards once more, have the students take their magnets and go searching again for wolves that are willing to come to their model human magnets.

This time, there will be 9! Repeat Day 2’s rhetoric and see what happens the next day.

Day 4:

After pre-hiding the cards once more, have the students take their magnets and go searching again for wolves that are willing to come to their model human magnets.

This time, there will be 27! Wow! What trends are the students noticing? They may notice that each day there are more wolves that are willing to come to people. They may also notice that the number of those wolves is increasing rapidly now!

Let’s try one last day.

Day 5:

After pre-hiding the cards once more, have the students take their magnets and go searching again for wolves that are willing to come to their model human magnets.

This time, all the cards will be attracted to the magnets!

Remind students that this has all been a model of how domestication works. It would not go so fast in real life! Nevertheless, it is a good demonstration of how a group of wolves, over a few generations, could start becoming more dog-like.

Wolf cards to print (15 pages of 8 equals 120 cards):

