

Life within the Pack

Age: Kindergarten

Objectives: Students will be able to...

- Describe the structure of a wolf pack.
- Differentiate between the different 'roles' within the wolf pack
- Explain how timber wolves communicate with each other
- Compare human families to a timber wolf pack

Standards

NGSS K-LS1-1 Use Observations to describe patterns of what plants and animals (including humans) need to survive.

Materials

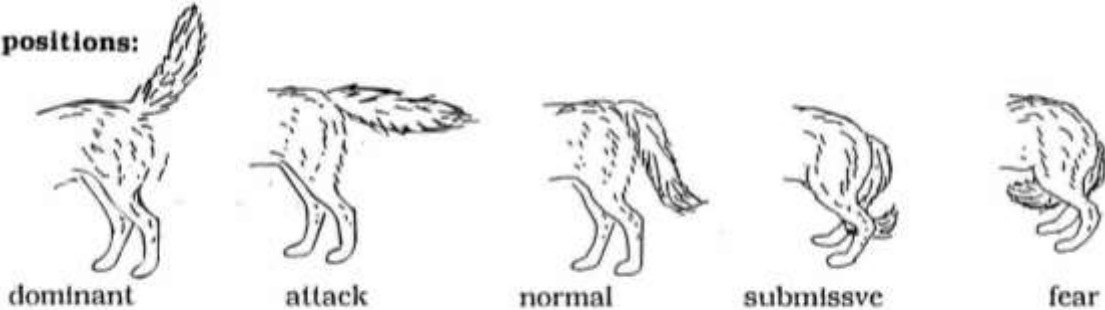
- Facial expressions and body postures of timber wolf (to display for class) or find photographs in books or online.
- Construction paper/index cards with name expressions and body postures that people use to convey feelings (happy, sad, mad, fear, proud, nervous, worried, or importance)
- Wolf ears & tail (optional)

Background information

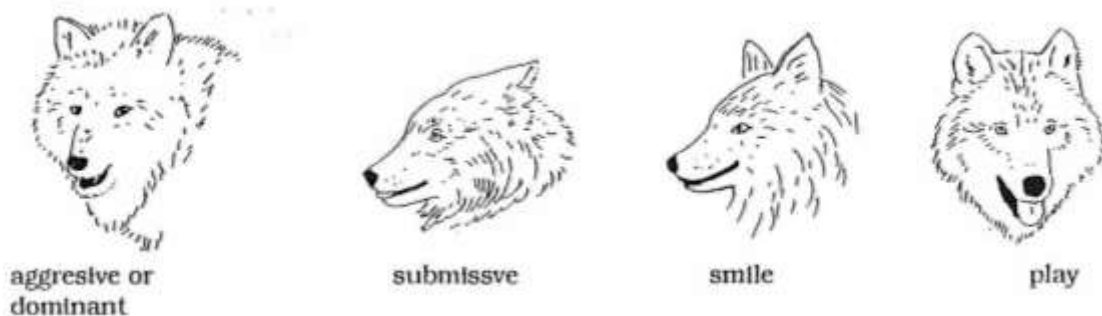
Wolves are social animals that live in an adult family group or "pack." In this pack, there is a dominant (alpha) male and female (the breeding pair), pups from the previous year (yearlings), and the current year's pups. Additional subordinate individuals may join or stay in the pack on occasion. The dominant pair is in charge of the pack, raising young, selecting denning and rendezvous sites, and maintaining the territory.

The hierarchy within the pack helps it function as a group. The hierarchy is displayed and maintained by dominant and submissive actions using facial expression, scent marking, howling and body language through tail positions.

Tail positions:



Facial expressions:



The wolf's facial expressions show a wide range of feelings. Some of these include

- **Aggressive or dominant-** eyes are in a direct stare with the ears up and forward. The corners of the lips are forward, the neck hairs and forward hair is standing up. The illusion of large size and the wolf displays its teeth.
- **Submissive-** shows smooth, flattened and pulled back expressions. The lips are drawn back, the glance is indirect and the ears are pulled back against the head. The intent is to appear smaller or less threatening to appease the dominant animal and generate harmonious interactions.
- **Smile-** similar to human smile with a closed mouth. The cheeks are pulled back and the ears are up.
- **Play grin-** full smile with mouth partially opened. Some "panting" may occur. This expression is used to initiate play. (From Karlyn Atkinson-Berg, Ed. Dept. Science Museum of MN).

Dominance within a pack is also shown through a wolf's body language. Body language is used within the pack as a means to prevent fighting, show feelings, maintain pack stability, and direct activities. Some examples of body language include

- **Tail postures-** to show dominance or to intimidate the tail is held high. For attack the tail is parallel to the group. Normal tail position is when the tail hangs in the relaxed state with the tip pointing to the group. Submissive tail position is placed between the legs.
- **Body postures-** to display dominance one wolf may "pin down" another wolf. When a lower ranking wolf approaches a high ranking wolf, it shows respect by keeping its body low to the ground with the ears and fur flattened close to the body. It will then reach up and link the

muzzle of the higher ranking wolf. This behavior is *active submission*. A more 'intense' method of communication between higher ranking and lower ranking wolves is the act of *passive submission*. The higher ranking wolf will show its teeth to the lower ranking wolf. The threatened wolf will lie on the ground and show its underside to the dominant wolf.

Wolves young and old like to play. The body language used to invite another to play resembles a dog that wants to play. The wolf looking for a playmate will approach another and bow down with the front flat on the ground. The wolf will wag its tail.

Wolf sounds- include the howl which may be used to indicate territory, prior to hunting or rejoining the pack. Besides the howl wolves also whimper, growl, or snarl to communicate with other wolves or pups.

Changes can take time within a pack. One example is when a non-breeding wolf attempts to attain breeding status. It can stay with its natal pack, 'bide' time and work its way up the dominance hierarchy. It also may 'disperse,' leaving its natal pack to find a mate and a vacant area in which to begin its own pack. Both strategies are risk. The wolf that views for dominance may 'lose' to another wolf and never achieved dominance. The wolf may leave the pack in autumn and be killed during hunting or trapping season. Dispersers must be on alert when entering other pack's territories.

Introduction

Stand in front of the class and without speaking demonstrate various feelings. Cross your arms in front of body, tap foot, etc. to show impatience. Ask children to guess what you're feeling. Discuss how they knew what you were feeling. Explain that animals show feelings by communicating with body language and sounds. Share with the class that this is what wolves do. "Today we will discover the ways that wolves communicate with each other. We will also find out why it is important that wolves 'talk to each other' to help keep the wolf pack together.

Lesson

1. Tell "wolves live in family groups called packs. The size of the group can be just 2 wolves or as many as 15 wolves." Do a THINK-PAIR-SHARE, ask students to discuss/think about what it would be like to live in a very small group or very large group, what would happen when important decisions were going to be made, who would be in charge?
2. "Timber wolf packs have special ways of working together as a group. In the pack there is a female and male leaders called the 'alphas.' They are kind of like the parents of the group. They are in charge of raising pups, finding places to live, capturing food and guarding their territory. Although other wolves will help with these tasks. How do you think the wolves know who is the leaders of their group?" Ask students to share responses. May ask them to think of who makes decisions in their homes and how that person was chosen.
3. "The alphas are usually strong and brave. They have a way of showing that they are important." Ask a volunteer to come up and stand like he/she is important. Ask the other students to share what they see in his/her body language.
4. "For alphas, they walk around tall and proud. Their tails are high in the air, the ears up and their fur fluffed out." It may nice to have some props to show this. Show students the tail positions of

in the resources or from the photographs, ask the students to determine which tail position and faces would be the alphas (dominant). Have students act this out.

5. "The other wolves keep their tails lower and never look at the more important wolves. When moving towards a more important wolf it will keep its body low to the ground, eyes down, and its ears tucked back. Then it may lick the muzzle of the more important wolf. This is showing the more important wolf respect." Show students tail positions and faces that would be the lesser important wolves (submissive or normal). Have students act this out.
6. Do a THINK-PAIR-SHARE, "how does your family show appreciation for the individuals in charge?"
7. "When someone misbehaves at home or school what happens?" allow responses. "Wolves can misbehave too. That's when the alphas may take charge. Since wolves cannot talk, the alpha will stare at the misbehaving wolf and maybe show its teeth. What do you think this means?" Show picture of aggressive wolf face. Have students act this out.
8. "When you want to play with someone you have ways to let that person know. What do you do?" Allow responses. "Wolves have their own way to do this. The wolf who wants to play, will bow down on its front paws and wag its tail. Sometimes the wolf will smile or grin and pant to show they want to play." Have students act this out.
9. "Wolves also use their voices to make sounds. Wolves howl to let other wolves know to stay away from their territory or just for fun." Have students try howling together. You may share that some states, scientists will go howling for wolves to know their locations and figure out pack size. "Wolves also whimper when talking to young pups or growl/snarl to show when they are angry." Ask the students to try these sounds.
10. Let students know that wolves all have a job in the pack.
 - a. Alpha male and female
 - b. Babysitters
 - c. Wolves fighting to become a higher ranking wolf
 - d. Weaker wolves (with tails between legs)
11. Charades: Have students take the photographs/or cards and have to act them out. The other students have to guess what the wolf is trying to show, or its role (alpha, submissive, wanting to play, etc.). This could be done in groups.
12. Act out a pack. Get students into groups of 4-6 individuals. Select one person to be the alpha male or female. Give each group a task to complete without verbally talking. The leader has to try to communicate this task to his/her group. Discuss afterwards how each group was able to communicate the task.
 - a. Move to a new location
 - b. Begin a hunt
 - c. All lay down
 - d. Hide
 - e. Capture prey

Conclusion

Review roles in group by having students act out this finger play. You may print copies of the script or share on a screen.

| Words | Movement |
|---|--|
| One lonely wolf High on a hill Howling her beautiful song | Holding up one finger, hold hand high to show, wolf on a hill |
| Another lonely wolf Down by the river Wishing for a pack to belong | With other hand held low, hold up one finger to indicate the wolf by the river |
| The wolf by the river Heard the wolf on the hill And together they made a pair | With fingers held up, move corresponding hands and bring finger together |
| They roamed together They hunted together And soon they made a den | With fingers held side by side, move from place to place and then make a hole with your hands |
| In the spring Some pups were born And they were a pack again | Place bended fingers of hands together then turn hands palm side up with 4-6 fingers wiggling. |

Extension Activities

Art

- Draw pictures or research pictures of wolves showing various feelings. Create a poster.
- Build the a wolf figure

Science

- Study other animals to learn about their communication. Have students share their findings with the class.
- Find special recordings of wolves howling to share with the class
- Compare a wolf's way of communicating with a dog. Create a venn diagram.

Literacy

- Read "Scruffy" a story about a wolf finding its place within its pack
- Write a story or play that shows the different roles within a pack

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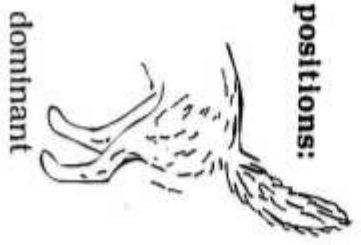
Wolf communication

Reference sheet for teachers

Timber Wolf Alliance



Tail positions:



dominant



attack



normal



submissive



fear

Facial expressions:



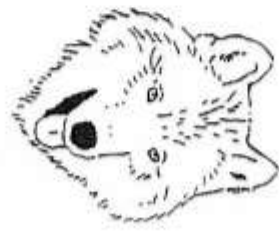
aggressive or dominant



submissive



smile



play

Make your own Timber Wolf

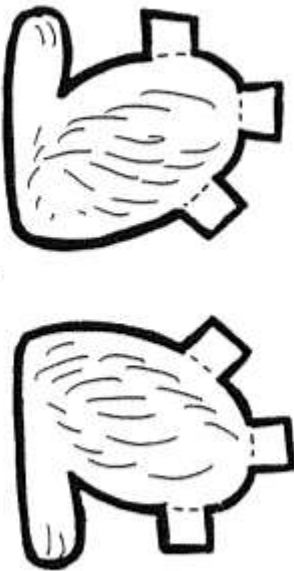
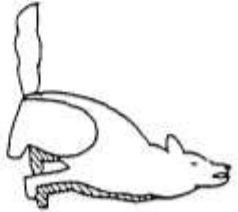
How to make your Timber Wolf model:

Color the pieces.

Cut on solid lines, fold on dotted lines.

Fold tabs on leg in and glue to outside of body.

Fold tabs on tail out and glue to inside of body.



legs



tail

