

Lesson Plan for Life Science

Unit: Dogs

Lesson: How Dog Senses Compare to Human Senses

Objective Statement:

Students will gain an appreciation of the ways in which a dog's senses differs from their own.

Standard(s) Addressed: Life Science

Please refer to specific state standards as they may vary.

Grouping for Instruction: **X Large Group** **X Small Group(s)** **Individual**

Large Group - Class will be in Large Group for Modeling and Guided Practice.

Small Group(s) - Class will work in pairs to complete Venn Diagram

Individual - n/a

Methods/Activities/Procedures:

| Strategies | Student Learning Activities <i>(Before, During, After)</i> |
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| <ul style="list-style-type: none"> • Activate Prior Knowledge | <p>Procedure: The following quiet exercises are designed to actively show how a dog's world is different from ours. The differences between children in the class will determine how long these quiet discovery exercises will be effective.</p> <p>HEARING – Teacher administers and asks questions- "Let's close our eyes and listen very carefully. Can you hear the traffic outside on the street?" (Use whatever is the clearest sound audible to the children in the room)</p> <p>"Can you hear the sound of the wind blowing through the trees?" (Use an example of less audible sounds i.e., your own breathing, hum of classroom ceiling lights)</p> <p>"Can you hear the sound of a bird chirping in the tree across the street? The sound of a student walking in the hall upstairs?" (Ask about implied sounds that they can not hear but they know exist e.g., cat purring in their house, a bee buzzing on a flower)</p> <p>"Open your eyes without talking. A dog can hear most of those sounds! Dogs can hear much better than we can. They can even hear sounds we can hear only by using special scientific equipment"</p> <p>SMELL "Silently close your eyes again. Now, take a deep breath through your nose. Can you smell the air freshener I put in the outlet by the door?" (Use whatever scent is most prominent in the room)</p> |

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| | <p>"Can you smell the laundry detergent your Mom washed your clothes with?" (Use a scent readily apparent but subtle)</p> <p>"Can you smell the perfume I am wearing today? Can you smell the spearmint chewing gum that I have in my desk?" (Use scents that cannot be smelled from a distance)</p> <p>"Silently open your eyes. Dogs have an incredibly good sense of smell. Did you know a dog could smell the footprints of the last person that walked across the floor (three days ago!)? A dog's talent for smelling smells that we can't smell at all is so unique that we are still not able to copy it even with special scientific instruments. A scientist took one tiny drop of a scent and mixed it with 400,000 drops of water and the dog was still able to identify it. That is like putting a spoonful of sugar in a large pond of water and having it still taste sweet."</p> <p>SIGHT</p> <p>"Silently, close your eyes really tight. Now open them up just a little so that you are just barely peeking through your eyelashes.</p> <p>"Everything is sort of fuzzy, isn't it. This is about as close as we can get to experience how dogs see. Not very good, is it! Now, take your hand and move it quickly back and forth in front of your face. You can see the movement pretty fast, but you can't really see your hand very clearly. Neither can a dog! Dogs can't see in clearly in detail, but they spot movement much better than we can."</p> <p>"Let's think about why dogs see movement so well. Before dogs became human pets, they had to hunt for their own food. Dogs needed to see their prey move so they could chase and catch it. Also, they needed to see movement to protect themselves and their babies from other predators."</p> <p>"Maybe that helps to explain why most dogs like to chase things that move quickly and may even bite at things as they move, including people."</p> <p>TOUCH</p> <p>"Remember that last time you bumped into something or got a cut. That HURT, right? The sense of touch is the same between dogs, so always remember, if it hurts you - it hurts a dog."</p> |
| <ul style="list-style-type: none"> • Model Lesson | <p>Review the findings of the discovery exercises and demonstrate how to compare and contrast facts in a Venn Diagram.</p> |
| <ul style="list-style-type: none"> • Individual Assessment | <p>Pair up students and pass out the Dog vs Human Venn Diagram. Instruct the students to write compare and contrast facts about dogs and humans. (Venn Diagram is included with this lesson plan)</p> |

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Resources (Materials/Texts/Visuals/Technology):

- **Dog vs Human Venn Diagram**
- Computer with internet access – the list below has some great info for extra info
- www.Dogbreedinfo.com
- [Extraordinary Dogs: Stories](#)
- [Guide Dogs of America: Training](#)
- [Guide Dogs for the Blind, Inc. \(see "Guide Dog Training"\)](#)
- [Dogs for the Deaf, Inc.\(see "Our Dogs"\)](#)
- [Assistance Dogs International Inc.\(see links about guide dogs, hearing dogs, and service dogs\)](#)
- [International Association of Assistance Dog Partners\(see "Educate"\)](#)
- [Yahooligans: Service Dog Links](#)

Evaluation Method: TO, SP, WW

Assessment will be visual (**teacher observed**), **student participation** and **written work** (Venn Diagram). The children will demonstrate the ability to compare human senses and dog senses. Knowledge confirmation will be checked through student participation/discussion and partner work. The rubric for the worksheet is as follows: Total points – 10 (Facts about each of 4 contrasting senses – 2 pt. each, (Fact about sameness of sense of touch – 2 pts.) Students should score 8/10 points to show acceptable understanding of lesson.