Activity: “Horse Communication Sounds” (5 - 10 minutes)
Grade Level: K - 2
Materials: Tape recorder Blank Tape
Make a tape containing horse sounds (snort, nicker, squeal, neigh, etc.)

Gather children into a circle and tell them they must listen by not talking during this activity. Play each sound from the tape and discuss the meaning of each sound (play one sound at a time). After discussing each sound, have the children imitate the sound and put it on the blank tape. Play this tape back so the children can enjoy their imitations.

Application:
~ Have each child exhibit a nonverbal expression and then the horse’s corresponding verbal expression, e.g. a happy expression followed by a nicker.

II. DIGGING DEEPER...
Activity: “How Does it Feel?” (3 - 5 minutes)
Grade Level: K - 2
Materials: A feather Sandpaper
Burrs Cotton balls
Ice cubes

Ask the children if it hurts when a mosquito or fly bites them. “Does it hurt the horse if a fly bites it?” “How do we know it hurts?” “Do horses like to be brushed?” “How do we know that?” “Explain that some things feel good and some things feel bad to the horse. Have each child touch their skin with each material. Ask each child which materials were pleasant and which were unpleasant.

Application:
~ Have members discuss materials that are pleasant and unpleasant to the horse.

Activity: “Simon Says” (10 - 12 minutes)
Grade Level: K - 2
Materials: Yarn or bags (cut in 6” strips) to make a horse’s tail
Twist ties (if using yarn) Stapler (if using bags)
Behavior check list cards (Refer to Horseless Horse book - “How Hoses Talk”)

Explain different movements of the horse’s head, tail, and feet. Explain how the head, tail, and feet should be moving for various expressions. For example, a horse that is startled will raise it’s head and snort, a horse that is mad will swing it’s tail and pin it’s ears back, a horse that is nervous prances on it’s feet, and a horse that is happy may just stand still or gently swish it’s tail. Distribute materials to construct tails. Give the children 10 - 15 strips. Place strips side by side on table and fasten together with the stapler or twist-tie. Review each movement. Explain to the children that they will be playing Simon Says. Explain that Simon is going to say things like; act like a horse that is angry, and the children should wring their tails. Remember that young children don’t like to lose, so leave out the part of the game that eliminates poor listeners.
Application:
~ Distribute behavior check lists. Have children observe horses’ behaviors and check off each behavior they see.

Activity: “How Horses Ears Work” (15 - 20 minutes)

Grade Level: K - 2

Materials:
- Paper grocery bags cut into 1” wide strips by the length of the bag (1 per child)
- Pipe cleaners (2 per child)
- Pattern of ears
- Glue
- Hole punch
- Colored construction paper
- Tape or stapler
- Scissors
- Hand mirror

Paragraphs depicting horses expressing emotions in various situations (Refer to Horseless Horse book)

Ask the children to pair up. Have them say hello to their partner while facing each other. Then have them turn back to back and say hello. Explain that the horse, unlike people, are able to direct their ears in different directions to hear better. Also explain that the horse expresses itself (communicate) through the use of its ears just as people do with their facial expressions. We will construct horse ears and show how or what horses are saying by their movements. Then show what the ears should look like and provide a brief demonstration identifying the steps and key points of ear construction. Pass out materials. Have children construct their horse ears. Staple the finished ears onto pipe cleaners (1 ear to 1 pipe cleaner). With adult assistance, place grocery bag (head band) around the top of the head and staple the ends together. The adult should punch holes and anchor the pipe cleaners through the holes on the head band. Show the children how the horse moves his ears. Discuss why the ears move forward, pinned back, one ear forward - one ear back, drooped down on each side, etc. Allow children time to practice moving their ears. Read a descriptive paragraph and have the children manipulate their ears to illustrate the horse’s emotions. Allow time for each child to move their ears to the proper position (Use hand mirror as needed). Observe their ear placement to ensure they understand the lesson. Be sure to recognize each child’s participation.

Application:
~ Ask the children to watch a horse’s ears and explain what the animal is expressing.

Activity: “Where Can I See - Where Can a Horse See?” (12 - 15 minutes)

Grade Level: K - 2

Materials:
- Worksheets showing a horse’s field of vision (See attached handouts)
- Crayons or markers
- Yarn

Have each child stand with their arms extended out to each side. While looking straight ahead, ask the children to wiggle their fingers starting with their arms back out-of-sight, slowly moving their arms forward until they can see their fingers. Repeat the exercise, but have the children begin with their arms extended over their heads. Ask the children where their field of vision is and where their blind spots are. Have each child illustrate their field of vision with their arms. “What determines your field of vision?” “Do different animals have different fields of vision?” Explain that different animals have different fields of vision, and their eye position is important in determining an animal’s field of vision. Have an adult hold a horse still while another adult explains a horse’s field of vision. To illustrate vision range, mark areas with yarn so lines radiate from the horse. Walk around the horse and have the children tell you when you are in a visual zone and when in a blind zone.

Application:
~ Ask the children why a horse would need to have a greater field of vision than humans?
III. LOOKING WITHIN...

Activity: "Yummy - Yukky" (7 - 10 minutes)

Grade Level: K - 2

Materials:
- Moldy hay
- Fresh hay
- Water - cold, tepid, and hot
- Stones or gravel
- Sawdust (wet and dry)
- Whip
- Spurs
- Brush
- Liniment
- Peppermint
- Picture of a fire

Have children feel, smell, and touch the articles. Provide two areas: one marked pleasant and one marked unpleasant. Ask the children which articles are pleasant and which are unpleasant to the horse. Have the children place the article in the appropriate area. Review with the children to make sure they understand why each article was placed in the appropriate area.

Application:
- Have each member say what sense the horse would use to determine whether or not the article was pleasant.

IV. BRINGING CLOSURE...

Activity: "A Pre-taste Assessment" (1 minute)

Grade Level: K - 2

Materials: A snack for each child.

Have the children close their eyes. Serve the children a snack but tell them not to eat it until they listen, feel, and smell it just as a horse would do with its own feed. Can they guess what the snack is based on their senses other than sight.

Application:
- Ask the children how a blind horse would determine if an object is edible.

V. GOING BEYOND...

Take the children to a horse farm. Watch the horses as they move around and try to determine what the horses are saying to each other. Have the children draw pictures of their experiences to share with family members.

Have the children read or have a horse story read to them. Ask them to imagine the senses the horse in the story might use. Make a collage from old calendars or magazines depicting the horse in the story.
Reading Adventures...

This is a listing of reading materials that can be used by you as background, for sharing before to set the stage for the lesson, or for sharing afterwards to reinforce the lesson.

- Nature’s Secrets Communicating, by Paul Bennett
- Five O’clock Charlie, by Marguerite Henry
- Misty of Chincoteague, by Marguerite Henry
- How Animals Talk, by Susan McGrath

Writers:
- Tiffany Burke - 4-H Advisor, Knox County
- Mary Deem - 4-H Advisor, Washington County
- Jennifer S. Kessler - Agricultural Education Teacher, Buckeye Valley High School
- Debbie Rardin - 4-H Advisor, Knox County
- Sandy Vincent - 4-H Advisor, Washington County