

Horses, Mules, & Donkeys

Alaska Agriculture in the Classroom for Pre-K (Ages 3-5)

Lesson Goal

The goal of this lesson is to teach Pre-K students how to recognize equine and to care for them and to understand that equine are useful animals for personal health and agricultural goals.

Student Objective

The student will be able to understand why horses, mules, and donkeys are raised, how to care for them, participate in a physical activity, participate in a group activity, recognize the images of equine and their



family members, participate in making food products, and to make healthy food choices.

Activities

- **Story Time:** Agriculture in Alaska and Children’s Books
- **Exploring:** Horse Power, Pony Up, Mules & Donkeys, Working Animals, and What Do Horses Eat?
- **Creating:** Horse Puppets and Horsetail Bookmarks
- **On the Go:** Pony Express and Pony Up
- **MyPlate:** Making Healthy Food Choices, Cinnamon Carrot Crunch, Pony Treats, and Horse Trail Mix

Vocabulary

Horse, donkey, mule, pony, gallop, rear, mane, stallion, mare, foal, and filly.

Rubric

Alaska Early Learning Guideline Domains	Student Target	Facilitating Activities
1 – Physical Well-Being, Health, and Motor Development	The student participates in a physical activity involving coordination and movement.	<ul style="list-style-type: none"> • Pony Express • Horse Trail Mix, Pony Treats, and Cinnamon Carrot Crunch.
2 – Social and Emotional Development	The student participates in a group activity, displays cooperative teamwork to accomplish a group goal, and recognizes individual contributions.	<ul style="list-style-type: none"> • Working Animals and Pony Express
3 – Approaches to Learning	The student sustains attention on a multi-task project with specified requirements.	<ul style="list-style-type: none"> • Horse Puppets and Horsetail Bookmarks
4 – Cognition and General Knowledge	<p>The student communicates comprehension by recognizing plants and is able to show understanding of how to care for them.</p> <p>The student is able to choose healthy foods.</p>	<ul style="list-style-type: none"> • Horse Power, Mules & Donkeys, What Do Horses Eat?, and Pony Up • Making Healthy Food Choices Cinnamon Carrot Crunch, Pony Treats, and Horse Trail Mix
5 – Communication, Language, and Literacy	<p>The student listens with attentiveness and curiosity.</p> <p>The student mimics sounds and/or actions.</p>	<ul style="list-style-type: none"> • Agriculture in Alaska and Children’s Books

Story Time!

Agriculture in Alaska

Horse Country

We have three horses here at our little farm outside of Fairbanks in the Goldstream Valley. Two of our horses are Norwegian Fjord horses. They are duns with stripes down their backs and stripes on their legs. We trim their manes so they stand up straight and look impressive. Fjords horses grow very long dense coats in the winter- some of their guard hairs can be longer than 5 inches. Our other horse is a Suffolk Punch draft horse. Suffolks are now a rare breed with fewer than 1000 worldwide. They were bred as plow/working horse England- a farm horse not a show horse.

We think our Suffolk Punch Bridger is a beautiful horse! He is a red chestnut and a little over 16 hands tall (a hand is equal to 4 inches) and he has a deep chest and very thick bones- you would be amazed at the size of his feet. All three of our horses are very cute when they get warm and fluffy in the winter. We chose these type horses because they are well adapted to the North and have long coats and are very easy keepers.

Some horses still need blankets on the winter to keep them warm and dry, but so far, we haven't need to put blankets on our horses. In the spring we stay busy brushing them and



sometimes the chickadees and ravens like to collect their hair for their nests.

Keeping horses in the North can be a little challenging. Like other livestock, they must have access to water, which means you need to have a water trough with a heater in it for several months of the year. The most important thing for them to stay warm in the winter is that they have plenty of hay and water. If you keep their boiler (stomach) full of hay they stay cozy. We keep an eye on our horses, because even in the winter they can get fat, but you also need to make sure they aren't getting to thin. In the summer we turn them out on pasture for a few hours a day. They love to eat grass- a nice change from the dry hay. Horses are grazers and spending time grazing is good for their happiness.

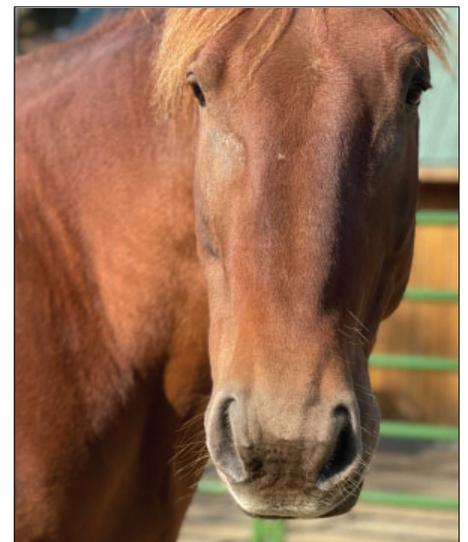
We feed our horses several times a day to keep hay in their stomachs. Because they are grazers, they can get stomach

ulcers or very grumpy when their tummies are empty. They can get pretty grumpy when they are hungry- and they take it out on each other. We also make sure they have a mineral block to get the vitamins and minerals that is missing from their hay or grass. We also give them a powdered supplement and vitamin E.

The farrier comes about every 6 weeks to trim their feet. In the winter we can go a little longer because their hooves don't grow as quickly. Our veterinarian checks them in the spring and gives them their shots and checks to make sure they are healthy. She floats their teeth every other year to make sure they can chew well. Can you imagine having your teeth filed?? At least they don't get cavities!

Horses in Alaska seem to live longer! I have heard of many horses living into their 30's, which is pretty old for a horse.

Lucy and Lorinda Lhotka



Children's Books

Materials

- The book The Artist Who Painted a Blue Horse by Eric Carle

- Coloring pages

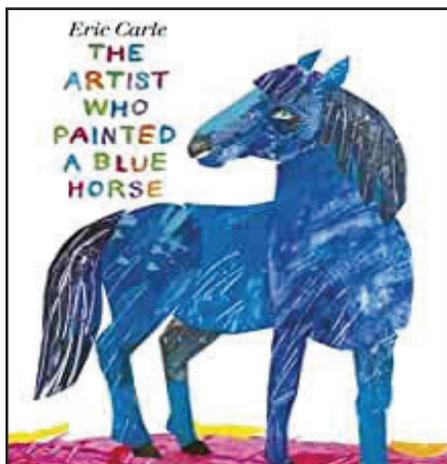
1. Read The Artist Who Painted a Blue Horse to the students.

"I am an artist..." begins the book, just like an imaginative child. He paints the world as he sees it—a red crocodile, an orange elephant, a purple fox, a black polar bear and a wonderful polka-dotted donkey.

2. Ask the students to think about the colors of the animals in the book compared to the color of animals in real life. Why are different animals different colors?

3. Discuss the use of color as camouflage and ask the students why this would help them. Discuss how different colors can make people feel differently. Ask students what their favorite color is? How does that color make you feel?

4. Ask the students to choose an animal and color it any color they choose. Ask them why they chose the colors they chose.



Exploring

Horse Powers

Materials

- Images of a horse family, a horse face, and horses galloping

1. Discuss that horses have been useful animals for thousands of years. Horses have been a part of human communities for a long time. Horses helped people travel faster, were used to fight wars and help people with their daily lives, including farming.

2. Show pictures of the horse family and explain: A male horse is called a stallion, a female horse is called a mare, and a young horse is called a foal. A young male horse is called a colt and a young female horse is called a filly.

3. Horses can walk, trot, canter and gallop. They live in pastures and stables. Show pictures of horses trotting, cantering, and galloping. Horses can gallop at around 27 mph. Ask students to try trotting, cantering, and galloping themselves.

4. Horses can sleep both lying down and standing up. Ask students if they could sleep standing up.

5. A horse's age can be told by looking at its teeth. Horses can run shortly after birth and live to be about 25 years old. Human children can't run until they are much older.

6. Horses are herbivores (plants only) and eat mostly

grass, hay, and grains. A horse can drink about 10 gallons a day. Ask students how much water they drink in a day. Ask students what kind of plants they like to eat.

7. Discuss that horses communicate their moods through their facial expressions—with their ears, eyes and nostrils. Ask your students to try communicating their mood with their facial expressions.

8. Horses have bigger eyes than other terrestrial mammals. Horse's eyes are on the side of their head and are capable of seeing almost 360 degrees.



Mules & Donkeys

Materials

- Images of Mules & Donkeys
- Crayons

1. Divide students into groups of 2 students each. Give each group a Mules and Donkeys Handout. Explain the similarities and differences between mules and donkeys, referring to the images of them on the handout. Have the students match up the parts of the animals as you discuss each one.

2. Donkeys and mules share similarities with horses, but they're their own species with different needs, behaviors, and motivations.

3. Donkeys come in a variety of colors: dun-grey (the most common) with or without a cross, dorsal stripe, and shoulder stripes, brown, black, red (similar to sorrel/chestnut), red roan (rare), or blue roan.

4. Donkeys will chase or attack intruders: strange equines, dogs and coyotes, bobcats, or other animals that come into their pasture. This makes them great livestock protectors.

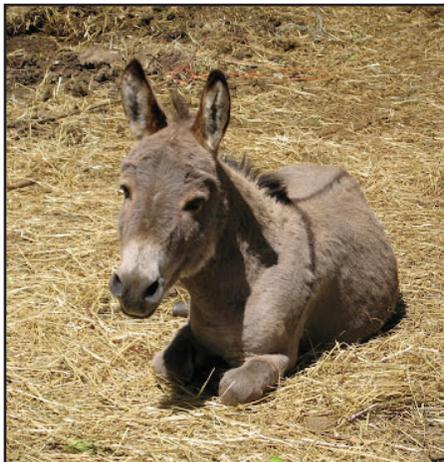
5. Donkeys like to be with other donkeys, and they love to play by galloping, kicking, leaping, rearing, rolling, and picking things up in their teeth.

6. Mules are the result of breeding a donkey (64 chromosomes) and a horse (62 chromosomes). Mules have 63 chromosomes, so it's difficult for them to have babies.

7. Mules are used for trail riding, pleasure riding, showing,

packing, and driving. Mules have a better tolerance for severe climates and tend to be sturdier and healthier than horses.

8. Mules have shorter ears than donkeys do, but their ears are longer than a horse's ears. Mules have a short, upright mane. Mules have a thinner tail than a horse.



Working Animals

Materials

- Internet connection
- Projection screen

1. Explain that there are many working animals that humans depend on and trust for their assistance. These animals make the quality of our lives better and benefit all of us. Ask the students if they can name any kind of working animals?

2. Show the PBS Kids slide show on working dogs and read the descriptions. <<https://www.pbs.org/wgbh/nova/dogs/working.html>>

3. Ask the students if they learned about any new animal jobs? Discuss why an animal rather than a person may be better suited for a particular job.

4. Ask the students about what they saw by using the cooperative learning strategy 'Think, Pair, Share,' instructing students to think about one thing they learned, turn to a neighbor, and take turns sharing it with each other.

5. Discuss how horses, donkeys, and mules are also working animals, used for pulling carts, riding, and packing supplies. Llamas and goats are sometimes used for packing and riding too. Dogs are used on farms to herd and guard other animals and to protect people.

Working Dog: Invite a working dog organization to visit your classroom and give a demonstration to the students.

What do Horses Eat?

Materials

- Laminated Photos of Horse Foods
- Tape
- Paper

1. It is important for horses to eat a healthy diet. Talk with the students how they should eat a healthy meal with the right amount of fruits, vegetables, protein, grains and dairy. Horses also need to eat a meal with the right amount of forage and grains.

2. Talk about forage. Forages are leafy green plants that can be found in hay and your horse's pasture. Hay is normally found in square bales or big round bales. Forages are the fruits and vegetables in our meals. It's important that horses eat good quality hay. Hay should be green, free of any dust or mold, and have lots of leaves! Pick out of the pictures what could be forage for a horse.

3. Talk about grains: Grain is seeds from plants that are grown in farmers' fields that can be used to feed horses. We eat grain in bread, granola bars, oatmeal, noodles and rice. There are many different types of grains that horses can eat. Pick out of the pictures what could be forage for a horse.

4. Create a horse diet. Have students make some horse meals. Have them mix up the photos and tape them onto the paper. Some feeds for horses

are made out of mixing different grains together.

Don't forget the water! Water is the most important nutrient for horses and people. Horses drink 10-15 gallons of water each day. Horses should have plenty of fresh clean water available to them.

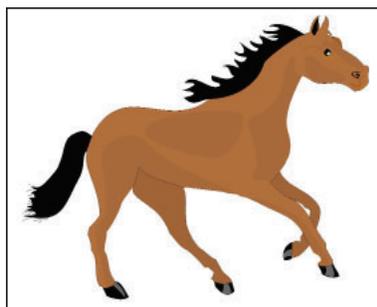
Creating

Horsetail Bookmarks

Materials

- Horsetail Bookmarks, printed on cardstock and cut
- Scissors
- Paper punch
- Yarn, cut to 6 inch lengths
- Tape

1. Hand out the Horse Tail Bookmarks. Ask students to cut out the horse. Laminate if desired
2. Use a paper punch to cut a hole for the tail for the students. Make sure the holes aren't too close to the edge of the paper or the yarn may rip out.
3. Assist students with pushing the yarn through the holes and knot yarn or try tying another piece of yarn around the tail to keep it all together. Cut off the ends of the tail to make it even..



Horse Puppets

Materials

- Horse Puppet Template
- Paper lunch bags
- Glue
- Scissors
- Crayons

1. Have the students color the template and then cut them out, assisting them if needed. The bag can also be colored to match their template.

2. Demonstrate how to glue the horse's nose to the bottom edge of the bag, the eyes, ears, and hair to the bag 'face,' and the tongue under the flap of the bottom of the bag. Make sure that the tongue section shows when the bag is flat.

3. Demonstrate how to glue the legs to the back of the bag.

4. You can add an optional yarn tail to the back of the bag if you wish. Tape 4-5 strands of yarn together and tape to back.



On the Go!

Pony Express

Materials

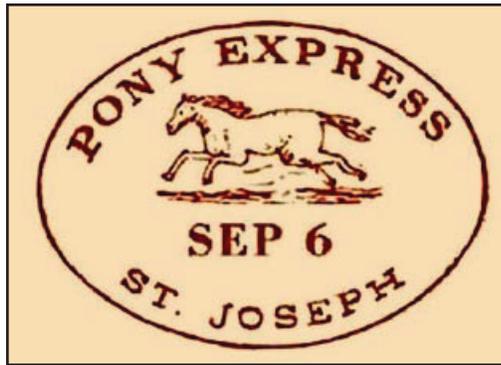
- Pony Express Map
- Image of Pony Express rider and pony
- Chalk
- Exercise cones
- 'Letters'
- Room to run

1. Ask students how their mail is delivered? Explain that the Pony Express was a mail delivery service that used horses instead of cars to carry the mail from one place to another. Beginning in 1860, young men on horseback carried letters from Missouri to California as fast as they could ride. Riding in the Pony Express across the western United States was very dangerous for the horses and the riders. The Pony Express had 190 relay stations.

2. Show students the Pony Express Map and discuss how long it might take to travel by horse, versus car or airplane. Although it only lasted a short time, the old trails can still be seen in the western deserts of Utah today.

3. Set up the cones in a very large square with chalk lines, marked from cone to cone around the square. Demonstrate safe tagging: light touch, like butterfly wings on the shoulder.

4. Divide the students into teams. Have one member of



each team stand at a different corner cone.

5. Hand one 'Letter' to each of the students at one cone. On the teacher's signal, the students with the bean bags run to the next cone and hand it off to their teammate. And that teammate runs to the next cone, etc. All of the students should run the same direction around the square, making sure to stay outside the cones and lines.

More Movement: Have students try walking, skipping, or hopping, between cones, instead of running, or a combination of these.

Make Your Own Mail: Have the students write their own letters or draw pictures to send by Pony Express.

PONY EXPRESS!

CHANGE OF TIME!  REDUCED RATES!

10 Days to San Francisco!

LETTERS

WILL BE RECEIVED AT THE
OFFICE, 84 BROADWAY,
NEW YORK,
Up to 4 P. M. every TUESDAY,
AND
Up to 2½ P. M. every SATURDAY,
Which will be forwarded to connect with the PONY EXPRESS leaving
ST. JOSEPH, Missouri,
Every WEDNESDAY and SATURDAY at 11 P. M.

TELEGRAMS

Sent to Fort Kearney on the mornings of MONDAY and FRIDAY, will connect
with PONY leaving St. Joseph, WEDNESDAYS and SATURDAYS.

EXPRESS CHARGES.

LETTERS weighing half ounce or under..... \$1 00
For every additional half ounce or fraction of an ounce 1 00
In all cases to be enclosed in 10 cent Government Stamped Envelopes,
And all Express CHARGES Pre-paid.
100 PONY EXPRESS ENVELOPES For Sale at our Office.
WELLS, FARGO & CO., Ag'ts.
New York, July 1, 1861.
SMITH & JAMES, SEEDINGERS AND PRINTERS, 8, FULTON STREET, NEW YORK

Pony Up!

Did you know that ponies are small horses and can be great friends? Just the right size for children! Ponies are incredibly strong for their size and can eke out nutrition from a pasture that a horse would starve on. They are hardier than horses and can withstand greater ranges in temperature. Their coats tend to grow thicker in the winter, which often doesn't shed out until the hottest days of summer.



MyPlate

Making Healthy Food Choices

Materials

- MyPlate Poster
- MyPlate Placemats, laminated for reuse

1. A variety of food choices from each group, multiples of the same types of food, plus some that don't fit into the suggested groups

2. Show the students the laminated MyPlate poster and discuss what it represents. Explain that it shows the five food groups a person should eat from each day to grow up healthy.

3. Point out the different colors and types of foods that belong to each group.

4. Hand out laminated MyPlate placemats.

5. Let students choose five foods from a pile of laminated food choices. Limit them to five choices.

6. Have the students place their foods into the food groups on their My Plate placemat.

7. Discuss their choices and ask them to trade in some of them for others in order to fill their plate—ending up with a choice for each food group area—a full plate.

8. Discuss how making food choices that fill in each food group area for meals will help them grow healthy.

Cinnamon Carrot Crunch

Materials

- Large mixing bowl
- Wooden spoon
- Small paper cups
- Plastic spoons

Ingredients

- Fresh carrots and celery
- Apples
- Lemon juice
- Raisins
- Vanilla yogurt
- Cinnamon

1. Prewash the carrots, celery, and apples, chop into small bite-size pieces, and place them into a large mixing bowl.

2. Add the lemon juice, raisins, yogurt, and cinnamon to the bowl and stir until coated evenly.

3. Chill the salad for 1-2 hours before serving.



Horse-Trail Mix

Materials

- Small paper cups

Ingredients

- Trail Mix items: such as mini-shredded wheat, dried apples, corn nuts, and cheerios

1. Explain to the students that this treat contains items that represent the foods horses eat, such as fruits and grains, which are all plant-based foods. Ask students to name some plant foods that they eat.

2. Set out bowls of each trail mix item and a paper cup for each student. Dish out a small amount into cup and explain what types of food horses eat. Explain what each item represents as you dish it out. The mini shredded wheat represents hay, dried apples represents apple treats and Cheerios represents oats, and corn nuts represent corn

3. Any variety of fruits, nuts, and grain-based food snacks are acceptable to use. Be aware of food allergies.

Pony Treats

Materials

- Large bowls
- Small paper cups

Ingredients

- Fresh fruit and vegetables—peeled and cut into small, bite-sized pieces

1. Explain that ponies love fresh fruit and vegetable treats.

2. Pass out cups, and let students choose their own pony treats from bowls of prepared fruits and vegetables.

References

The activities in this lesson have been, in part, adapted from the following references:

Rubric

- Alaska Early Learning Guidelines—<https://www.alaskaelg.org/goals-by-domain>

Agriculture in Alaska

- Horse Country by Lucy and Lorinda Lhotka

Children's Books

- The Artist Who Painted a Blue Horse by Eric Carle, Teaching Ideas—<https://www.teachingideas.co.uk/library/books/the-artist-who-painted-a-blue-horse>

Horse Power

- Horses, Alaska Agriculture in the Classroom—<http://www.fairbankssoilwater.org/user-files//Horse%20Lesson.docx>

Mules & Donkeys

- Horse Courses Online—http://www.horsecoursesonline.com/college/equine_behavior/lessoncollege/equine_behavior/lesson

Working Animals

- Learning To Give—<https://www.learningtogive.org/units/working-animals/introducing-working-animals#lesson-instructions>

Horse Height

- Horses, Alaska Agriculture in the Classroom—<http://www.fairbankssoilwater.org/user-files//Horse%20Lesson.docx>

What Do Horses Eat

- Horses, Alaska Agriculture in the Classroom—<http://www.fairbankssoilwater.org/user-files//Horse%20Lesson.docx>

Horsetail Bookmarks

- Horse and Rider, National Agricultural in the Classroom—<https://www.agclassroom.org/matrix/lesson/778/>

Pony Express

- Playworks—<https://www.playworks.org/resource/game-of-the-week-pony-express/>
- Horse and Rider, National Agricultural in the Classroom—<https://www.agclassroom.org/matrix/lesson/778/>
- Pony Express- National Park Service—<https://www.nps.gov/poex/playyourvisit/maps.htm>

Making Healthy Food Choices

- Grow It, Try It, Like It, U.S. Department of Agriculture—<https://www.fns.usda.gov/tn/grow-it>
- MyPlate Place Mat, U.S. Department of Agriculture—<https://www.myplate.gov/resources/graphics/myplate-graphics>

Your Resources:

Cinnamon Carrot Crunch

- Junior Master Gardeners—Eat, Grow, Go—www.jmgkids.us/LGEG

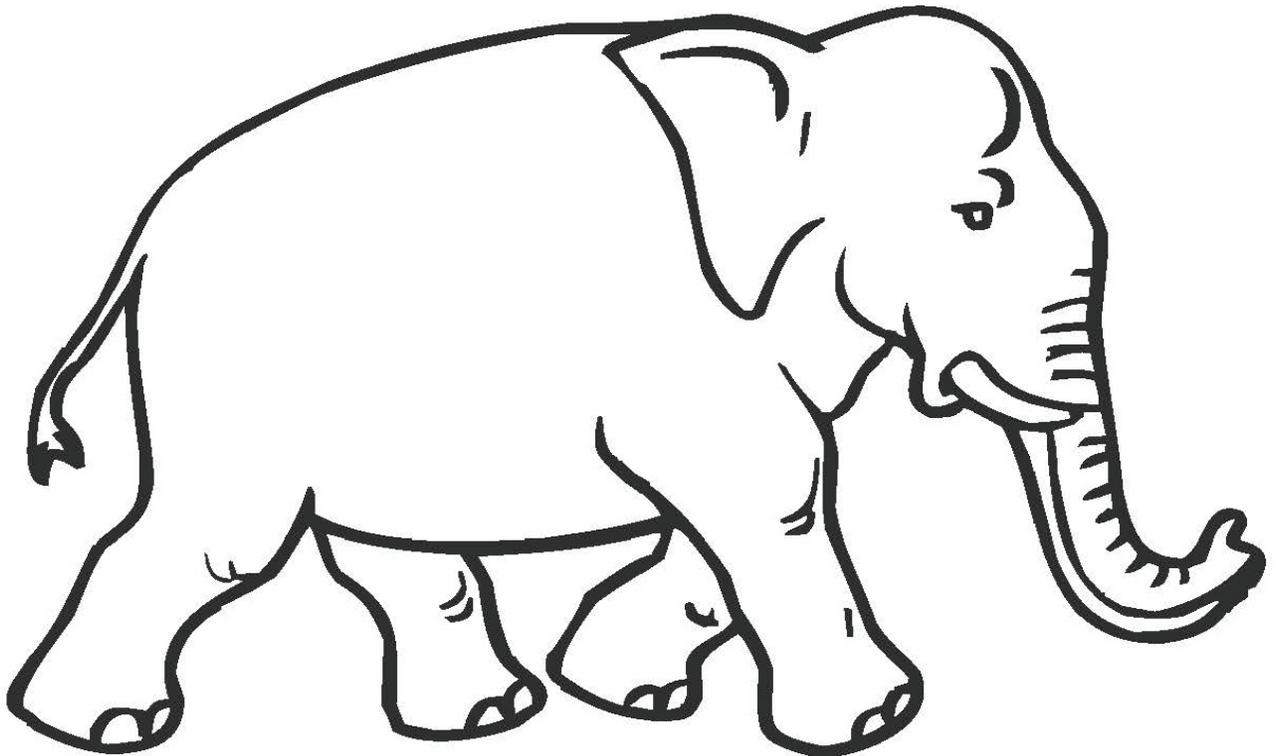
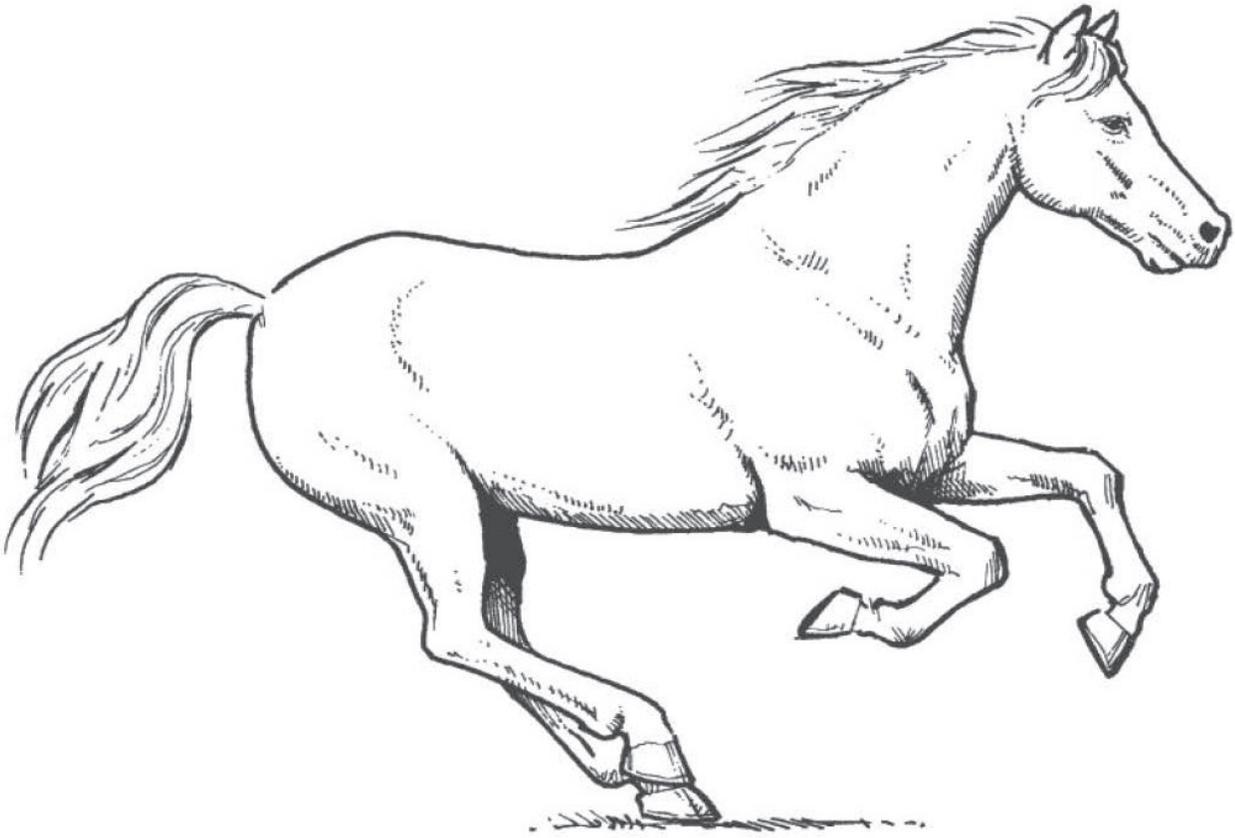
Horse Trail Mix

- Horses, Alaska Agriculture in the Classroom—<http://www.fairbankssoilwater.org/user-files//Horse%20Lesson.docx>

Resources

- Alaska Early Learning Guidelines—<https://www.alaskaelg.org/>
- MyPlate Poster and Place mat—<https://www.myplate.gov/resources/print-materials>
- MyPlate Tools, Graphics, Print Materials, and Videos—<https://www.myplate.gov/resources>
- Alaska Agriculture in the Classroom Lessons—<http://www.fairbankssoilwater.org/akagintheclassroomlessons.htm>
- National Agriculture in the Classroom Lessons—<https://www.agclassroom.org/matrix>

“The Artist Who Painted a Blue Horse” coloring pages



Horse Family



Mare and Foal



Stallion



Horse Head



Horses Galloping



Mules



Donkey

What Does a Horse Eat?



Corn



Soybeans



Beets



Barley



Oats



Wheat



Grasses



Carrots



Apples



Hay

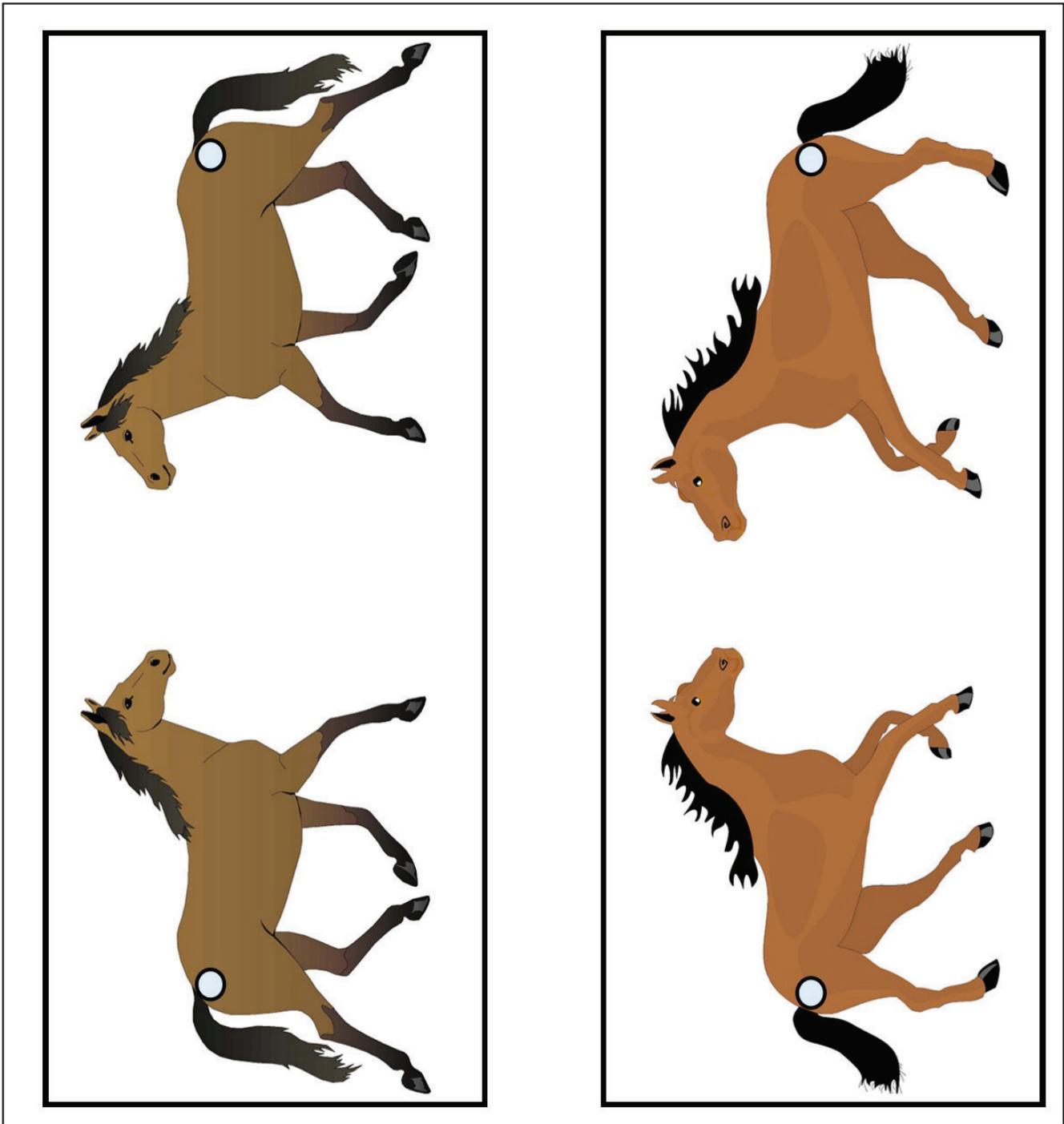


Pelleted Feed



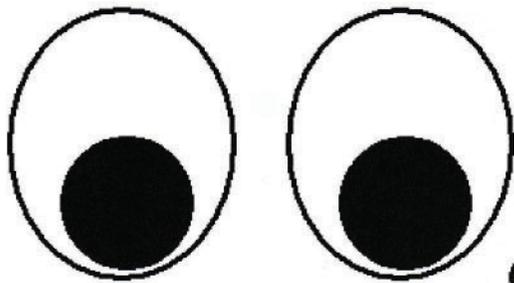
Sweet Feed

Horse Tail Bookmarks

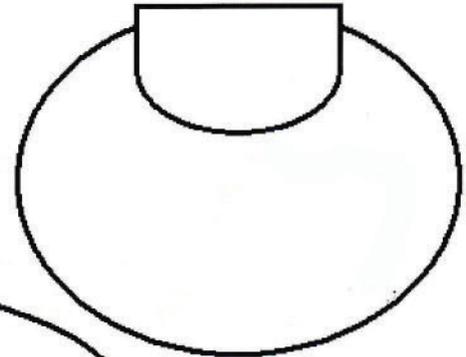


Print on cardstock. Help students cut out bookmarks. Laminate if desired. Punch holes where the circles are. Push 3-5 colored yarn lengths or string to make the tails.

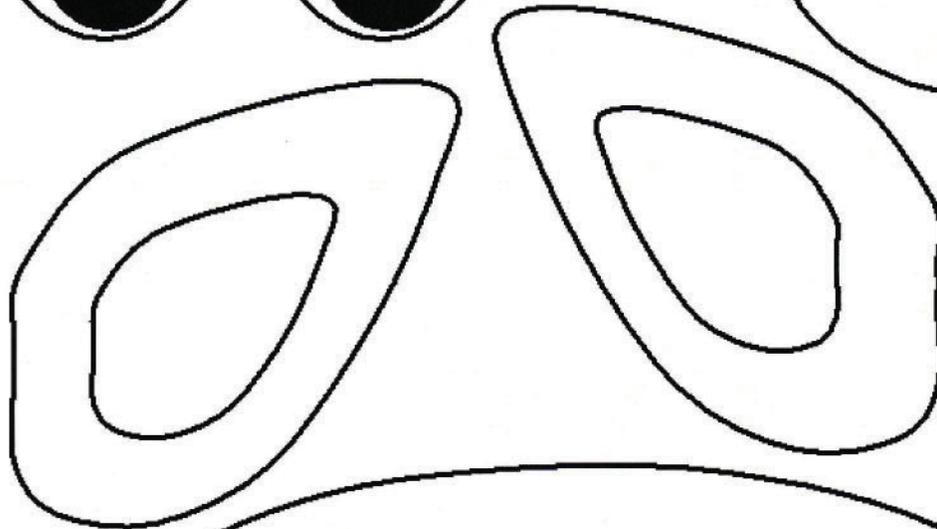
Horse Bag Craft Head Template



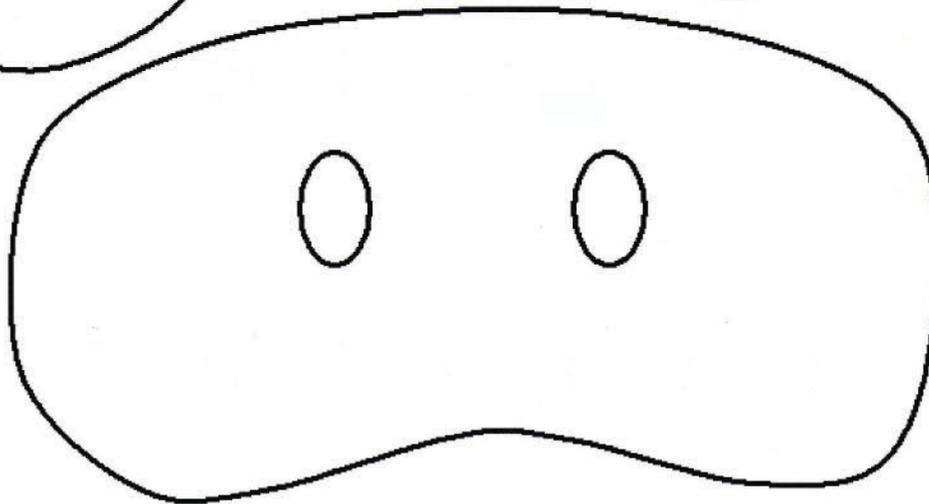
Eyes



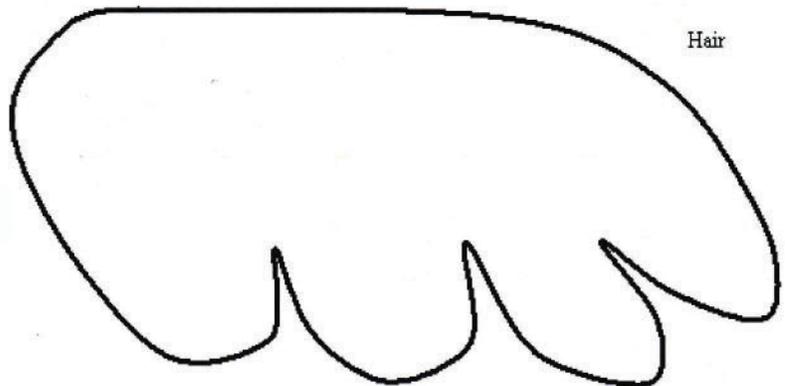
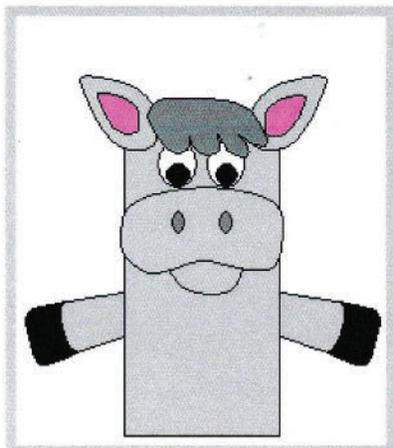
Tongue



Ears

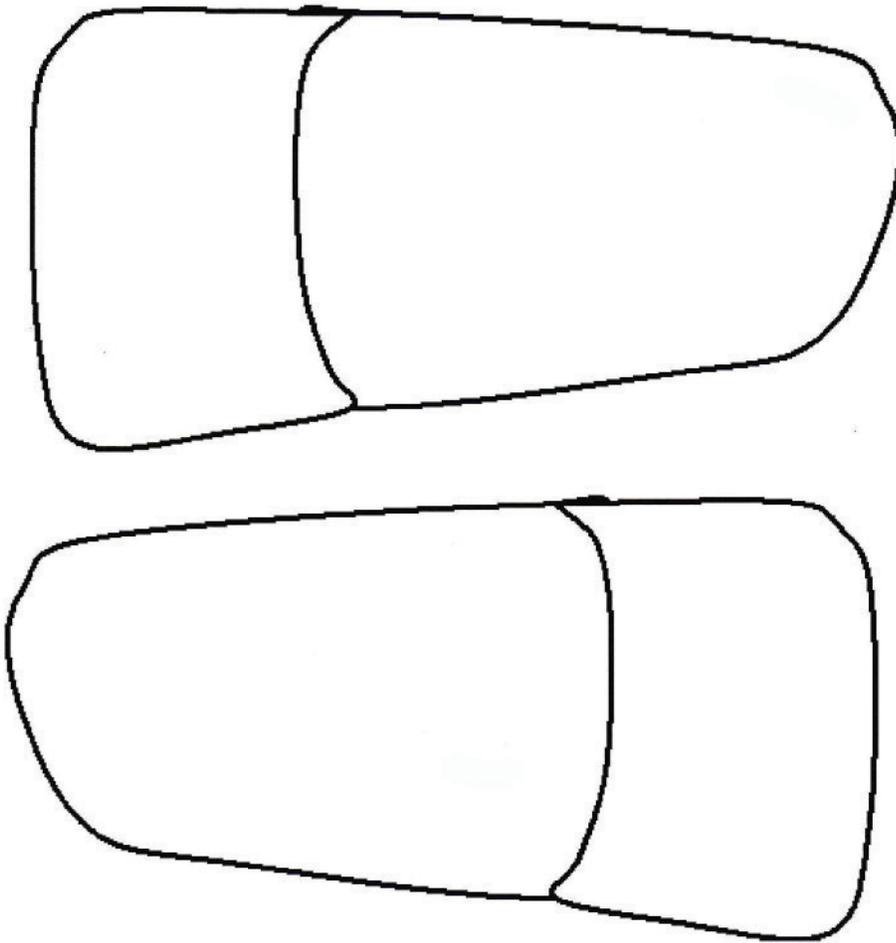


Nose

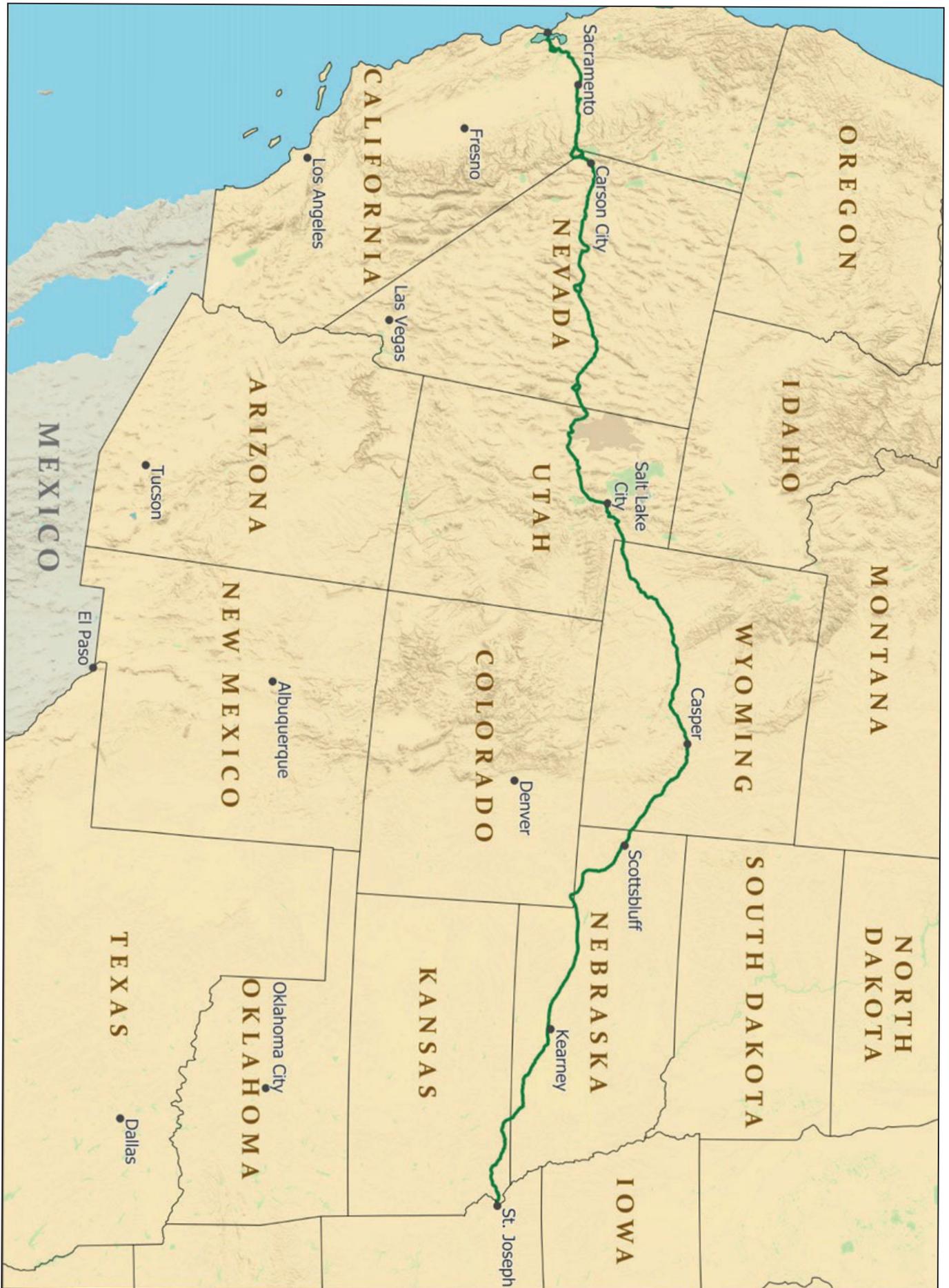


Hair

Horse Bag Craft Legs Template



Pony Express Map



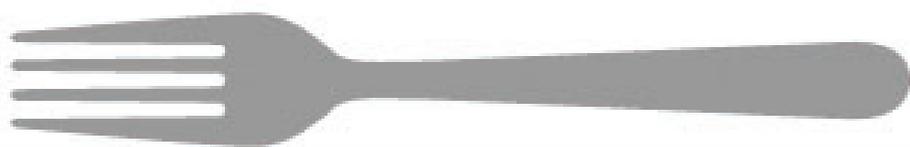
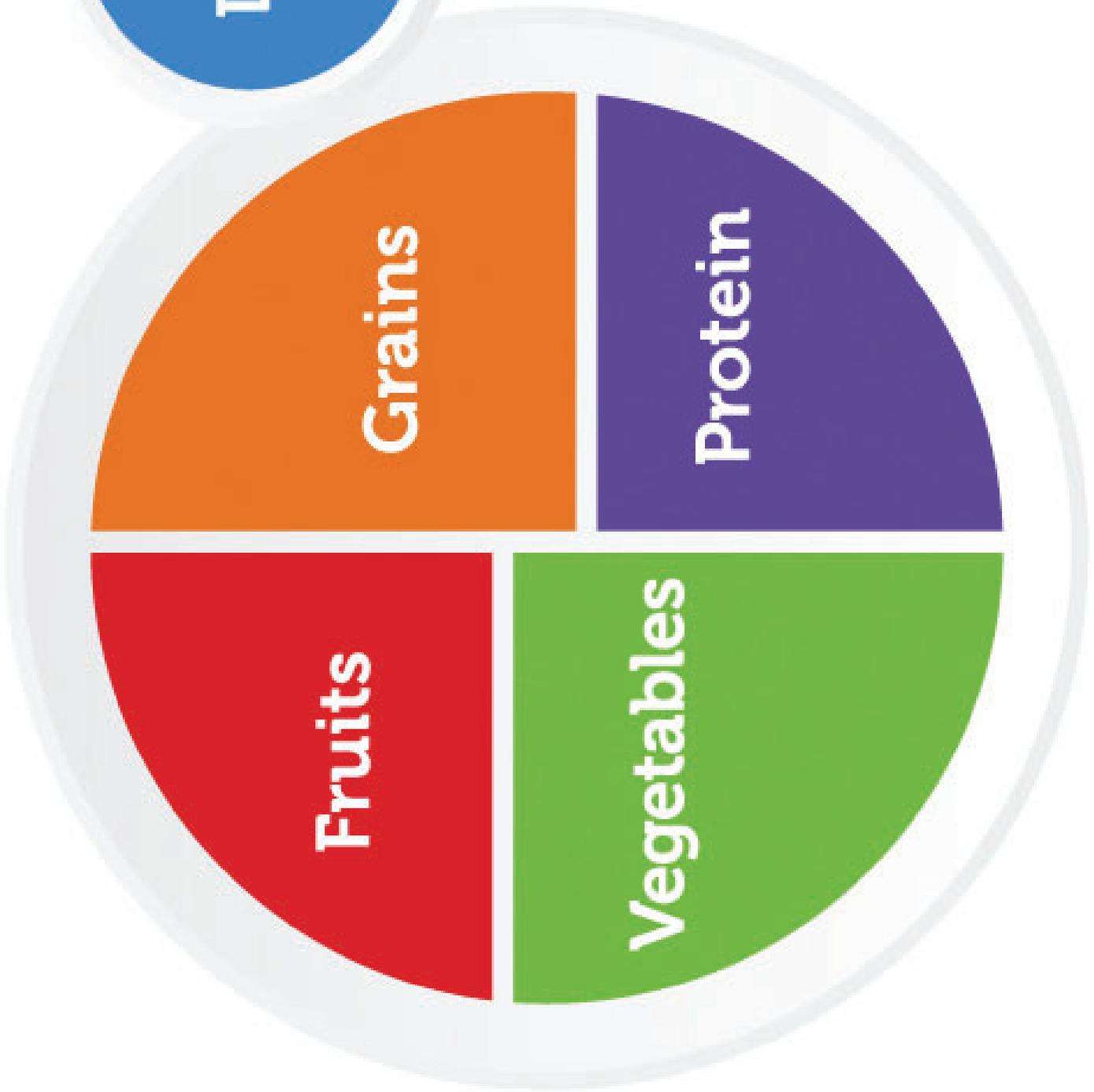
Pony Express – Rider and Pony



MyPlate Place Mat



Dairy



What's **MyPlate** All About?

