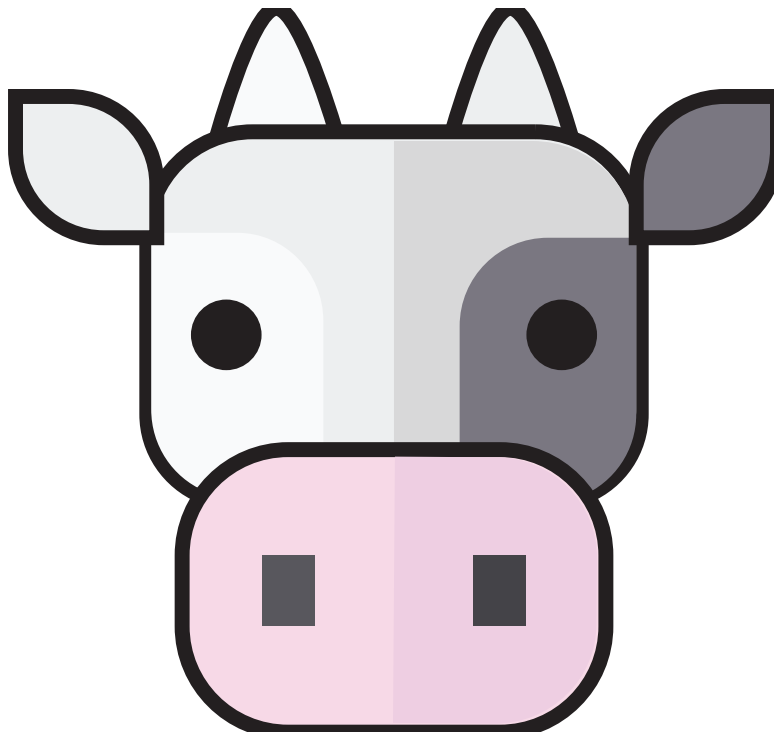


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All About Beef

Beef By-Products:

- Different cuts of beef:
 - Steak
 - Ground Beef
 - Roasts
- Gelatin
- Shampoo
- Marshmallows
- Footballs
- Furniture
- Make-up
- Gum
- Insulin

A 1150 pound market steer yields about 500 pounds of beef!

What Kind of Work Do Cattle Ranchers Do?:

- Oversight and Maintenance
- Cow-calf raising
- Cowboying
- Wrangling

Cattle Benefit the Environment:

- Grazing helps plants grow strong and healthy.
- Cattle aerate the ground by breaking it up with their hooves.
- Controlled and rotational grazing limit soil erosion while promoting grass and plant growth.

Adapting for Their Environment:

- Cattle stay warm by eating more.
- Some cattle have a thicker hide and coat that regulate body temperature during hot summers and harsh winters.
- Cattle are even-toed, hooved mammals.
- Cattle are adapted for grazing with a wide mouth and specialized teeth for eating tough vegetation.
- Cattle have 32 teeth but no incisors or canines. Instead they have a gummy pad that is used to rip up grass.
- Cattle are ruminant animals, with 4 chambered stomachs that help them quickly eat and digest large quantities of tough grass.
- Breeds of cattle raised in Wyoming have bigger lungs to prevent heart failure in high altitudes.

All About Dairy Cows

Dairy By-Products:

- Milk
- Cheese
- Yogurt
- Ice cream
- Sour cream
- Cottage Cheese
- Condensed milk
- Meat - mostly ground beef when the cows no longer produce milk
- Gelatin
- Leather
- Cosmetics
- Paint
- Margarine

A typical Dairy Cow produces about 7 gallons of milk each day!

What Kind of Work Do Dairy Farmers Do?:

- Oversight and Maintenance
- Herdsman
- Tanker Driver
- Milk Parlor Manager

Dairy Cows Benefit the Environment:

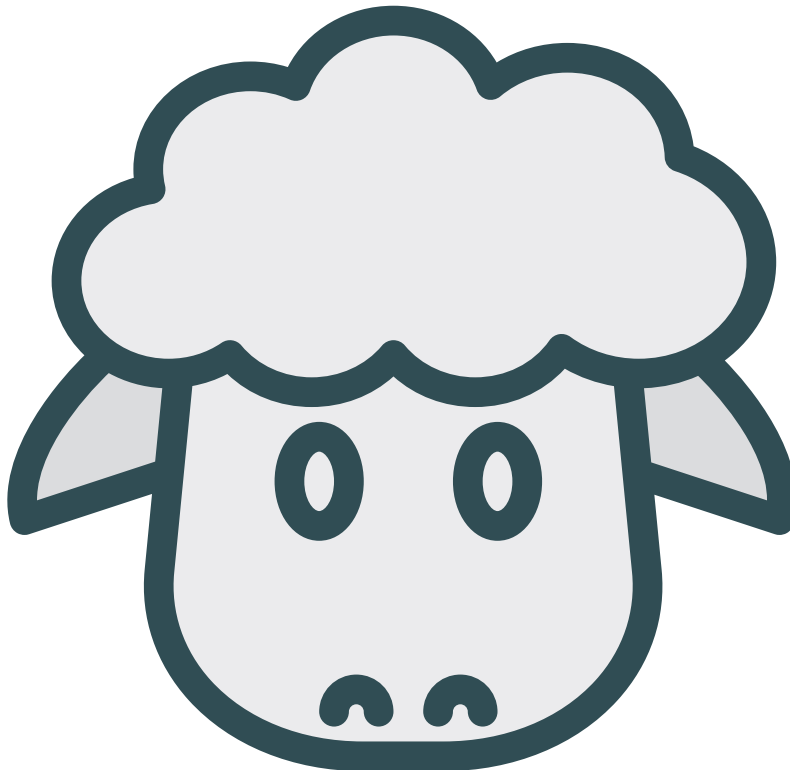
- New technology called a methane digester has been developed to collect methane gas. This methane is converted to electricity that can power the dairy and some homes.
- Manure is used to fertilize crops and grow nutritious food.

Adapting for Their Environment:

- Dairy cows have the ability to sweat and regulate body heat through changing their respiration rate.
- Cattle are even-toed, hooved mammals.
- Cattle are adapted for grazing with a wide mouth and specialized teeth for eating tough vegetation.
- Cattle have 32 teeth, but no incisors or canines. Instead they have a gummy pad that is used to rip up grass.
- Cattle are ruminant animals, with 4 chambered stomachs that helps them quickly eat and digest large quantities of tough grass.



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All About Goats

Goat By-Products:

- Fiber (angora, mohair, cashmere)
- Milk
- Cheese
- Meat
- Hides (leather)
- Soap
- Baby Formula

Goats are related to Pronghorn Antelope!

What Kind of Work Do Goat Ranchers Do?:

- Oversight and Maintenance
- Goat handler
- Milker
- Creamery Assistant

Goats Benefit the Environment:

- Grazing goats can control invasive plants and noxious weeds, as well as helping with fire prevention.
- Goats aerate the ground by breaking it up with their hooves.

Adapting for Their Environment:

- Goats can feed on weeds that are toxic to other animals.
- Goat's jaws are specially adapted to chew weeds and grasses.
- Goats are even-toed, hooved mammals.
- As herd animals, goats have a higher chance of survival.
- Horns help regulate a goat's body temperature.
- Due to their low body mass, goats have low metabolic requirements so they can survive where there is scarce food and/or water.
- Goats store water in their rumen for times when water is scarce.
- Goats are ruminant animals, with 4 chambered stomachs that help them quickly eat and digest weeds and tough grass.

All About Sheep

Sheep By-Products:

- Meat (lamb, mutton)
- Wool
- Lanolin
- Clothing
- Tennis Ball Covers
- Leather
- Chamois
- Tape
- Brushes
- Pet Food
- Milk
- Cheese

Wyoming ranks 4th in the United States for sheep production!

What Kind of Work Do Sheep Ranchers Do?:

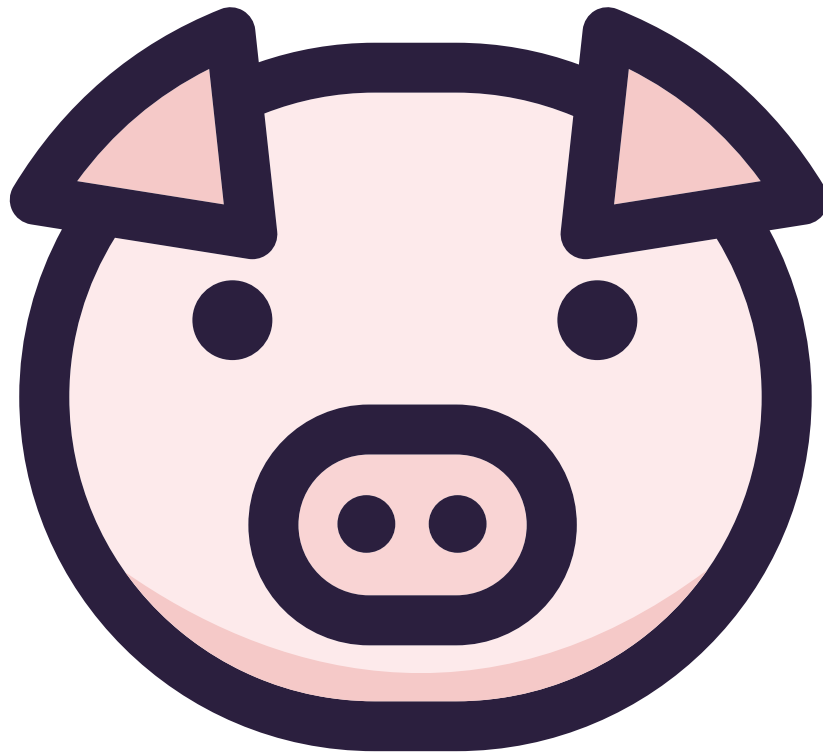
- Oversight and Maintenance
- Herding
- Shearing
- Breeding Livestock Guardian Dogs

Sheep Benefit the Environment:

- Grazing sheep can control invasive plants and noxious weeds, as well as helping with fire prevention.
- Sheep aerate the ground by breaking it up with their hooves.

Adapting for Their Environment:

- Sheep have wide-spaced eyes and rectangular pupils, giving them a large field of vision and helping them to see predators.
- Each sheep grows between 20 and 30 pounds of wool per year, which helps keep them warm in the winter.
- Sheep have a split upper lip and no teeth on their upper jaws to help them pull leaves of plants.
- Sheep are even-toed, hooved mammals.



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All About Hogs & Pigs

Hog & Pig By-Products:

- Different cuts of pork:
 - Sausage
 - Ham
 - Pork Chops
 - Bacon
 - Ribs
- Dog toys
- Lard
- Heart valves for humans
- Medicine
- Suede for clothes and shoes
- Gelatin
- Water filters
- Anti-freeze
- Make-up

A 250 pound hog yields about 150 pounds of pork!

What Kind of Work Do Hog Farmers Do?:

- Oversight and Maintenance
- Farm Laborer
- Swine Herdsmen
- Swine Breeder

Sheep Benefit the Environment:

- Hog manure contains a high amount of organic matter that helps fertilize soil.
- Hog manure and bedding can be mixed with the soil to improve organic matter content over time.

Adapting for Their Environment:

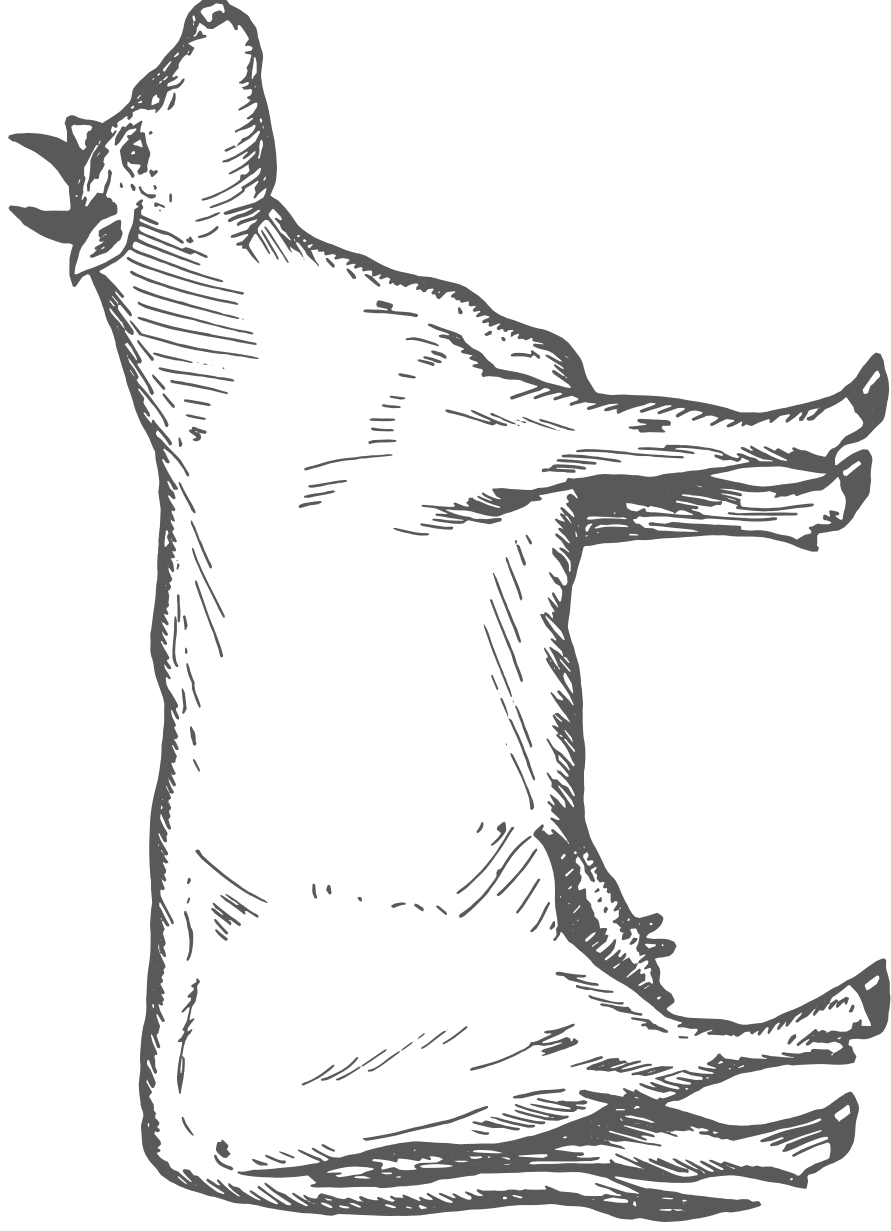
- Hogs' diet is composed mainly of corn, wheat, soy and barley; however, hogs are omnivores.
- Hogs raised in Wyoming have sparse, bristled hair, rather than the thick, woolly hair found on some breeds.
- Hogs are even-toed, hoofed mammals.
- Hogs have a single-chambered stomach, and require more nutrition than grass or hay can provide.
- Hogs wallow or roll in mud to cool off, prevent sunburn, remove parasites, and prevent bug bites.
- Hogs have a unique bone in their nose for digging. They have a blunt upper lip which is a flexible disc that is made of cartilage, covered in skin, and has lots of tactile receptors.
- The few sweat glands pigs have are in their noses.

Livestock Characteristics

Beef Cattle

Group Members: _____

Directions: Label one internal or external structure that is important to this animal for survival in Wyoming, or a by-product and its use. Your response cannot be the same as another. All structures need to be labeled.

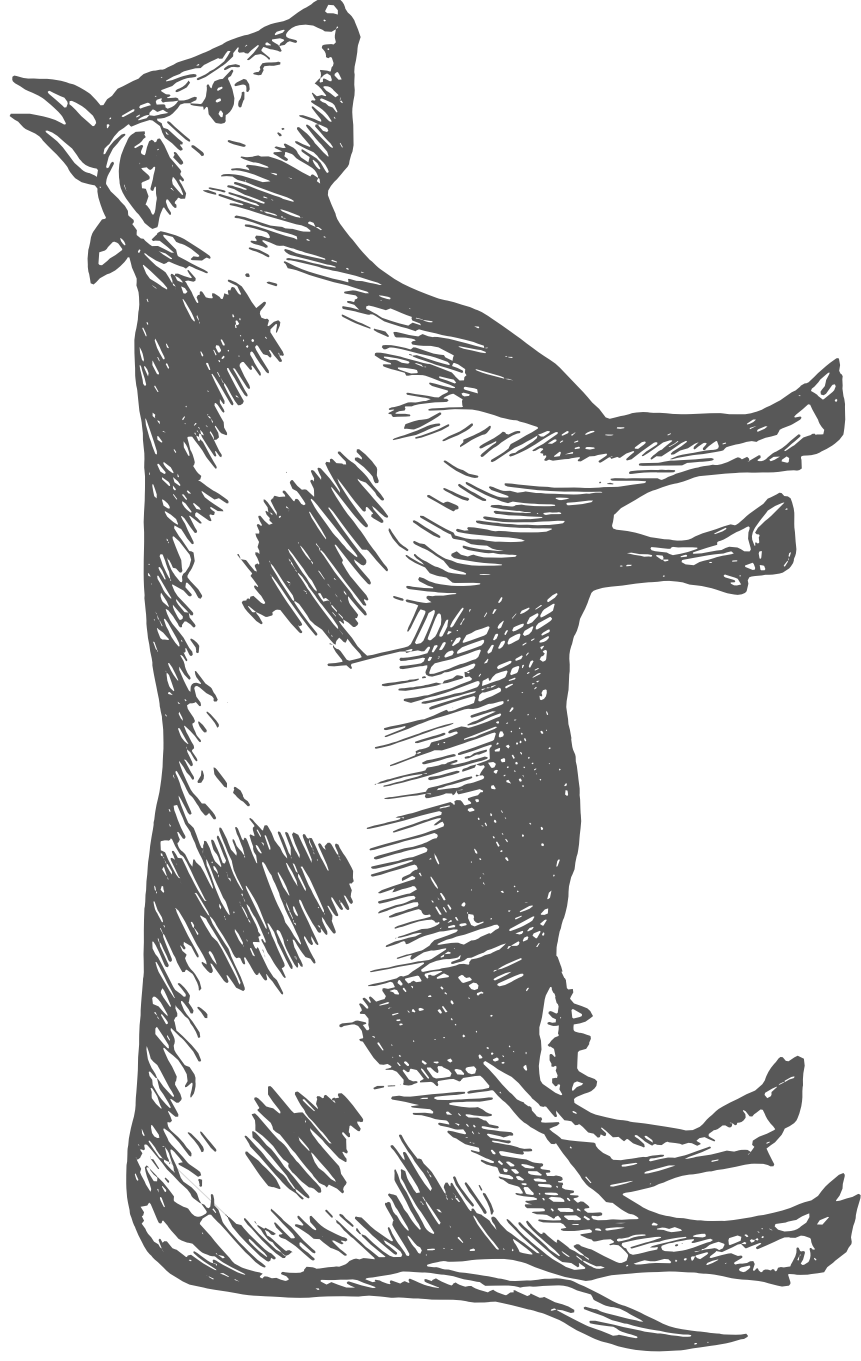


Livestock Characteristics

Dairy Cattle

Group Members: _____

Directions: Label one internal or external structure that is important to this animal for survival in Wyoming, or a by-product and its use. Your response cannot be the same as another. All structures need to be labeled.

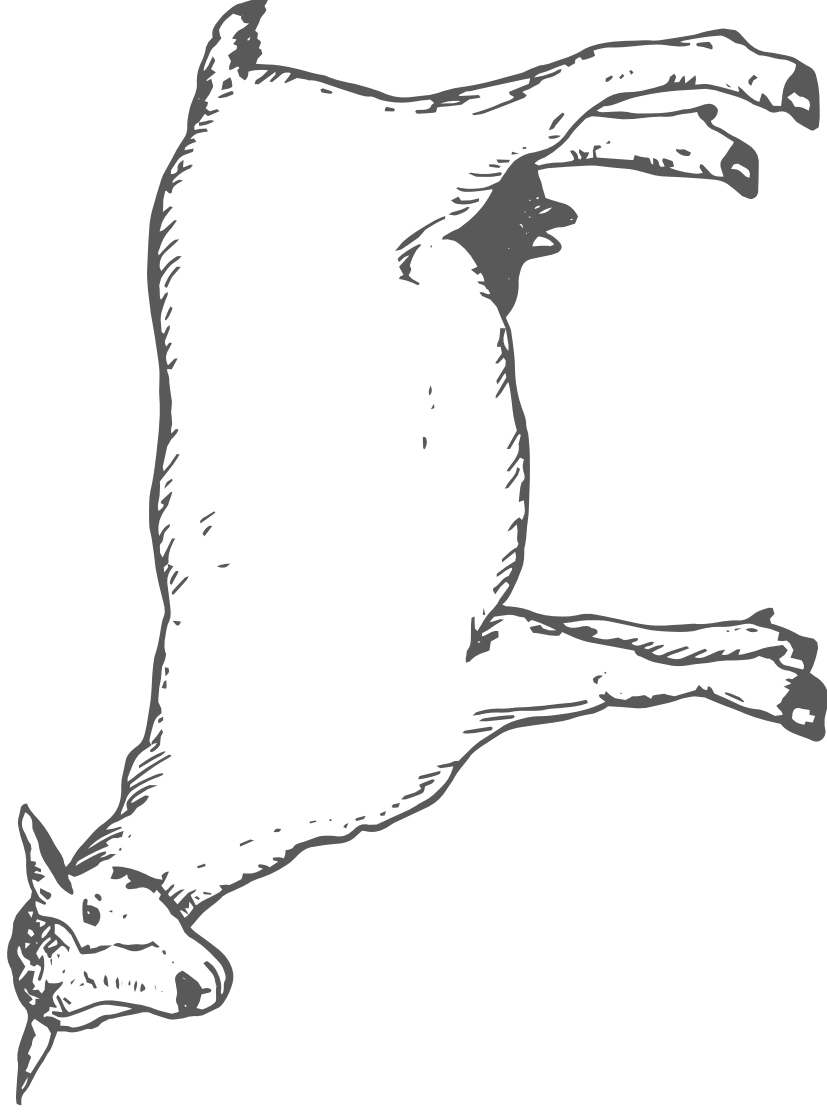


Livestock Characteristics

Goats

Group Members: _____

Directions: Label one internal or external structure that is important to this animal for survival in Wyoming, or a by-product and its use. Your response cannot be the same as another. All structures need to be labeled.

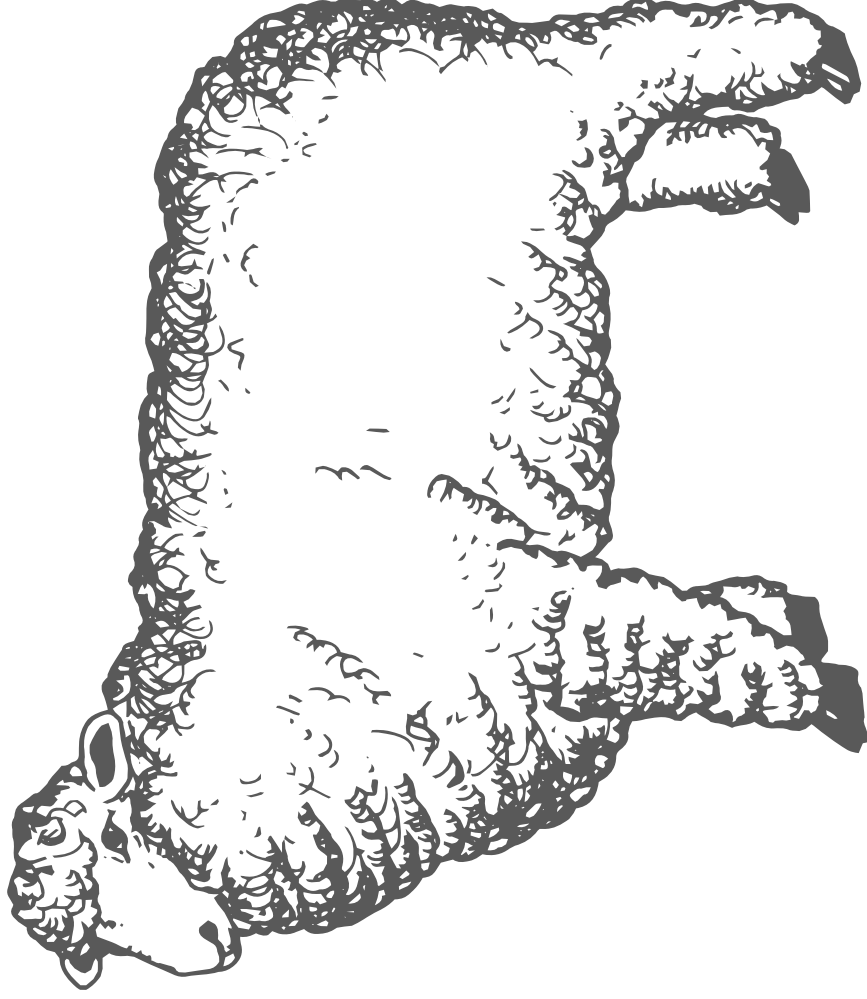


Livestock Characteristics

Sheep

Group Members: _____

Directions: Label one internal or external structure that is important to this animal for survival in Wyoming, or a by-product and its use. Your response cannot be the same as another. All structures need to be labeled.

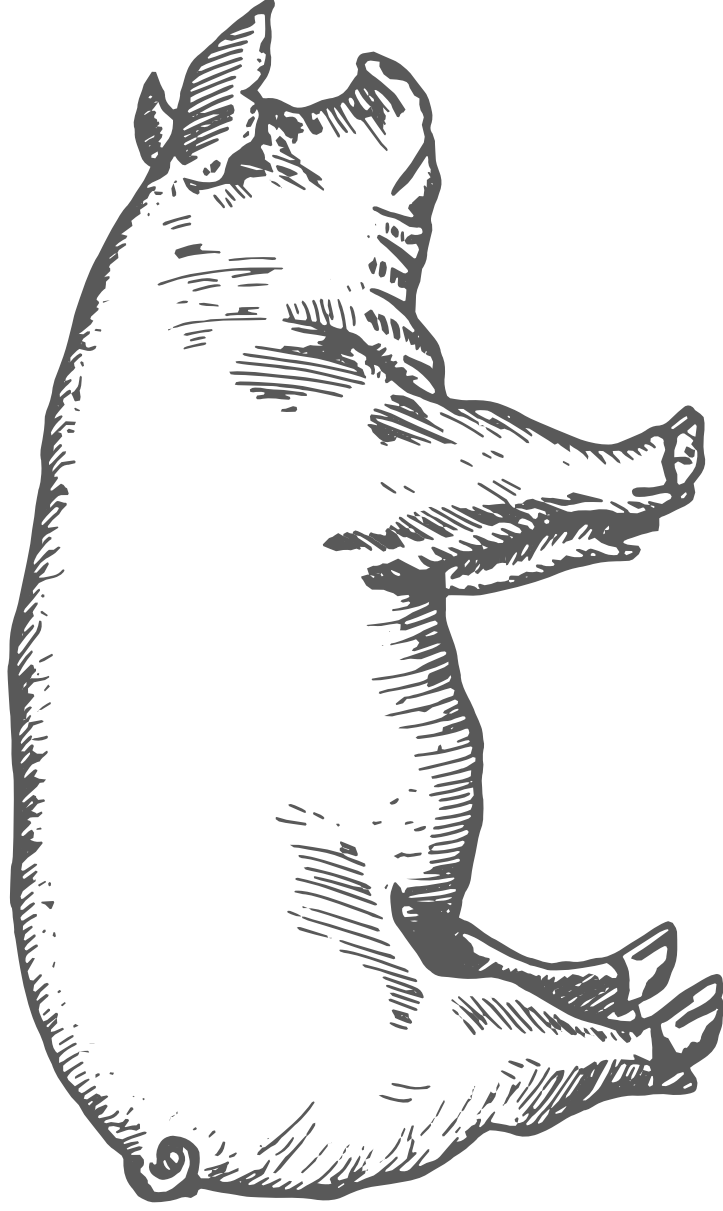


Livestock Characteristics

Hogs & Pigs

Group Members: _____

Directions: Label one internal or external structure that is important to this animal for survival in Wyoming, or a by-product and its use. Your response cannot be the same as another. All structures need to be labeled.

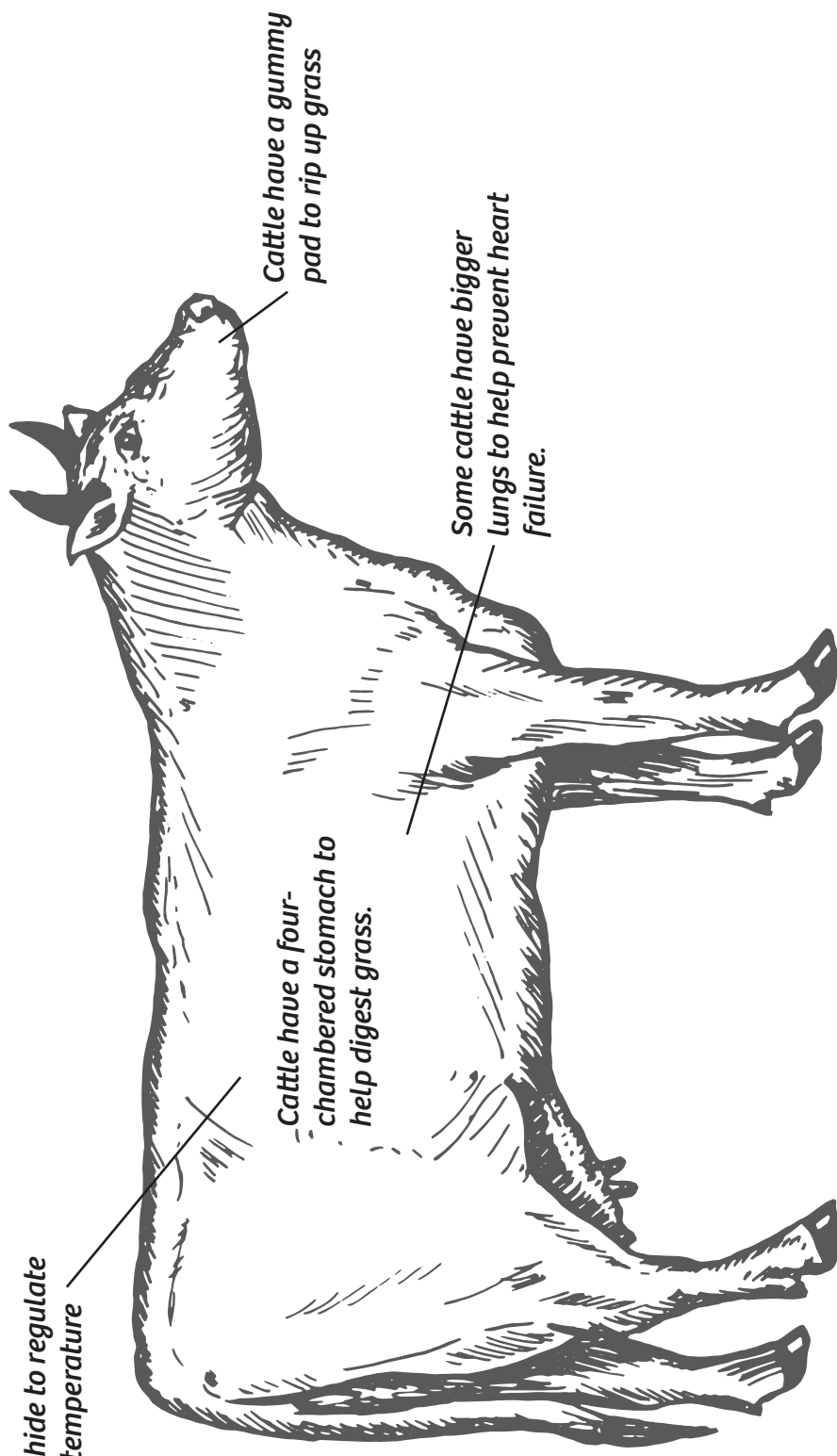


Livestock Characteristics

Beef Cattle

Group Members: Teacher Sample

Directions: Label one internal or external structure that is important to this animal for survival in Wyoming, or a by-product and its use. Your response cannot be the same as another. All structures need to be labeled.



Cattle produce several cuts of beef like steak, roast and ground beef.

Marshmallows are a by-product of beef cattle.

Football is a by-product of beef cattle.

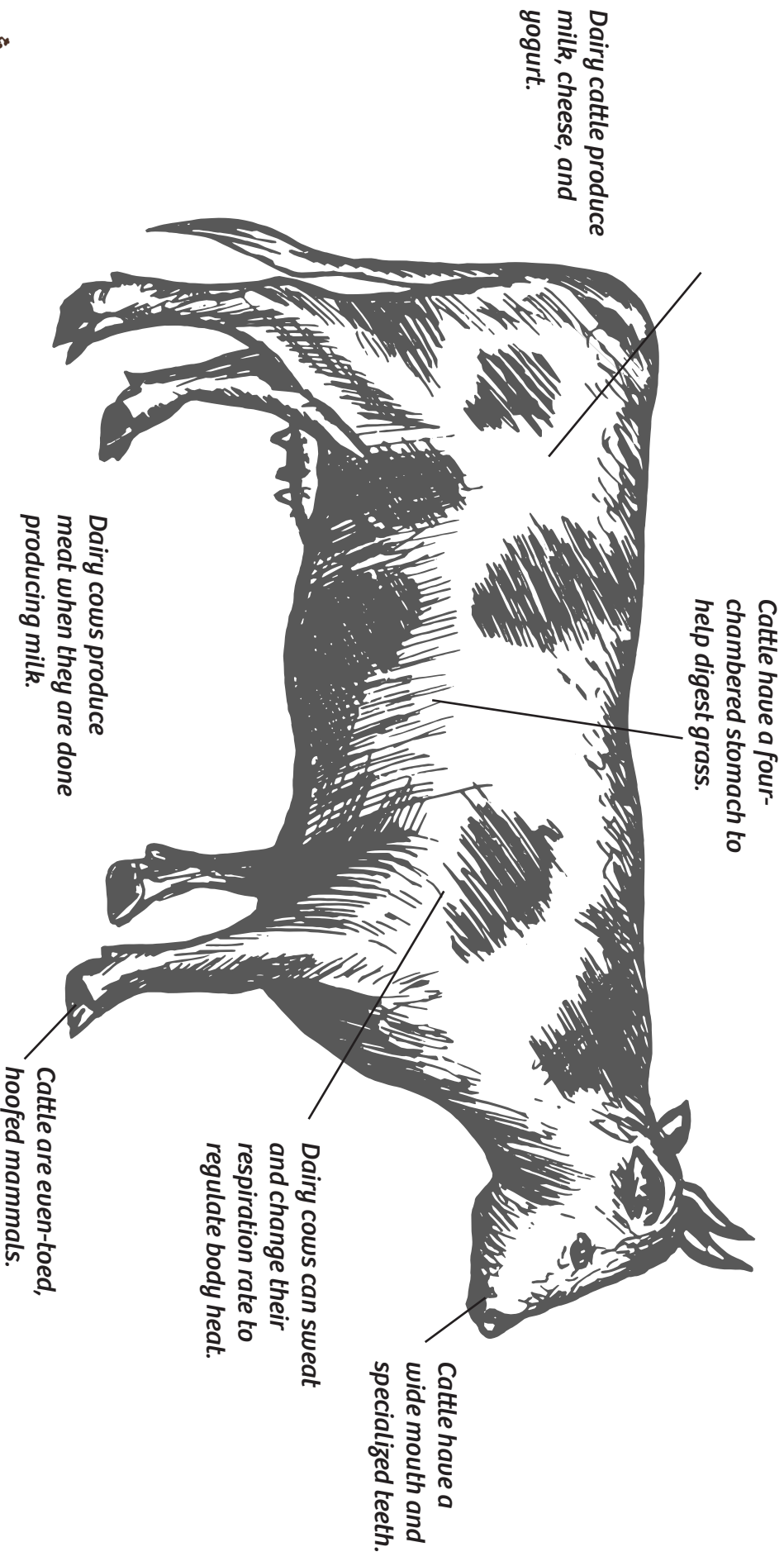


Livestock Characteristics

Dairy Cattle

Group Members: Teacher Sample

Directions: Label one internal or external structure that is important to this animal for survival in Wyoming, or a by-product and its use. Your response cannot be the same as another. All structures need to be labeled.

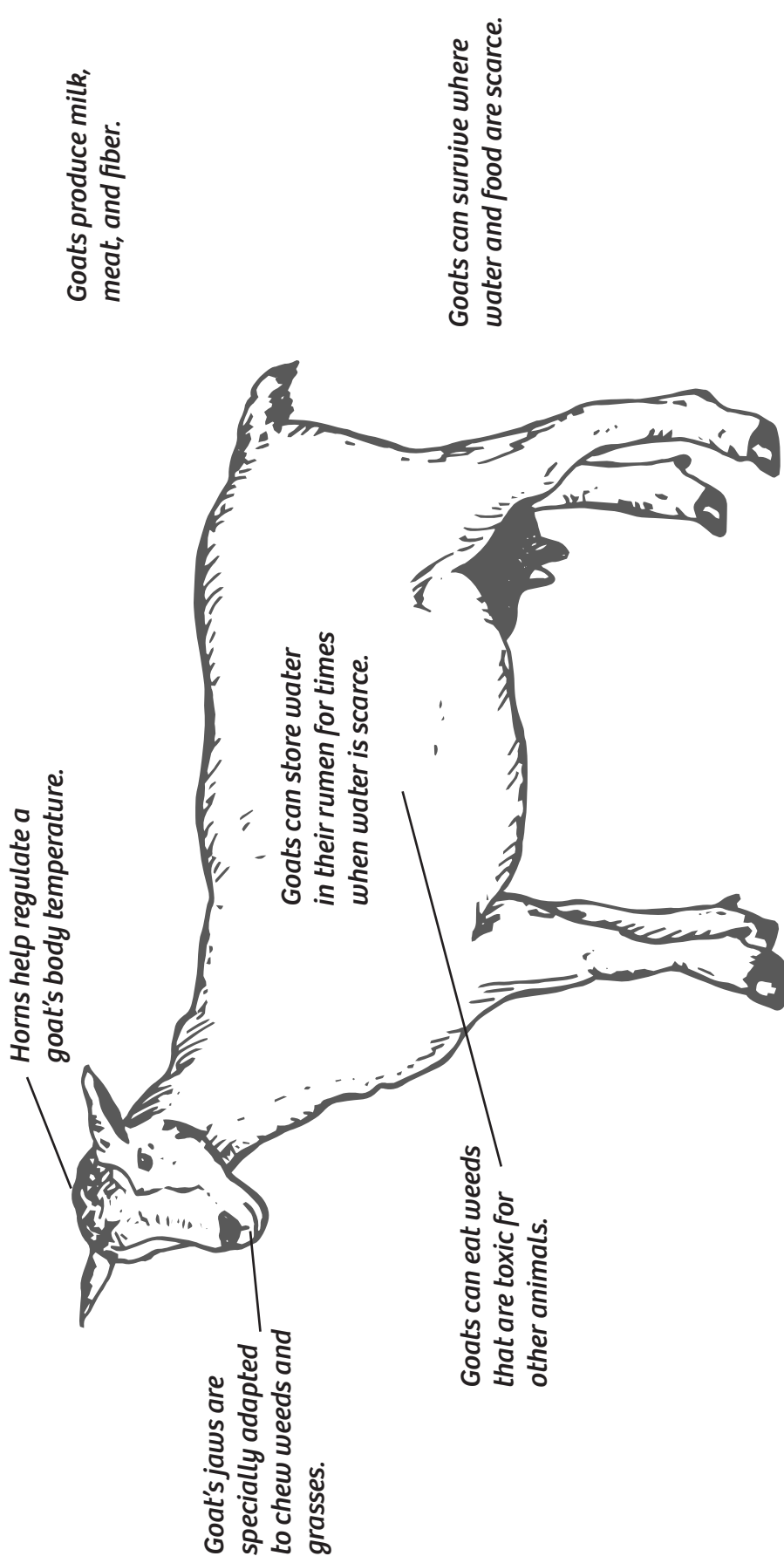


Livestock Characteristics

Goats

Group Members: Teacher Sample

Directions: Label one internal or external structure that is important to this animal for survival in Wyoming, or a by-product and its use. Your response cannot be the same as another. All structures need to be labeled.

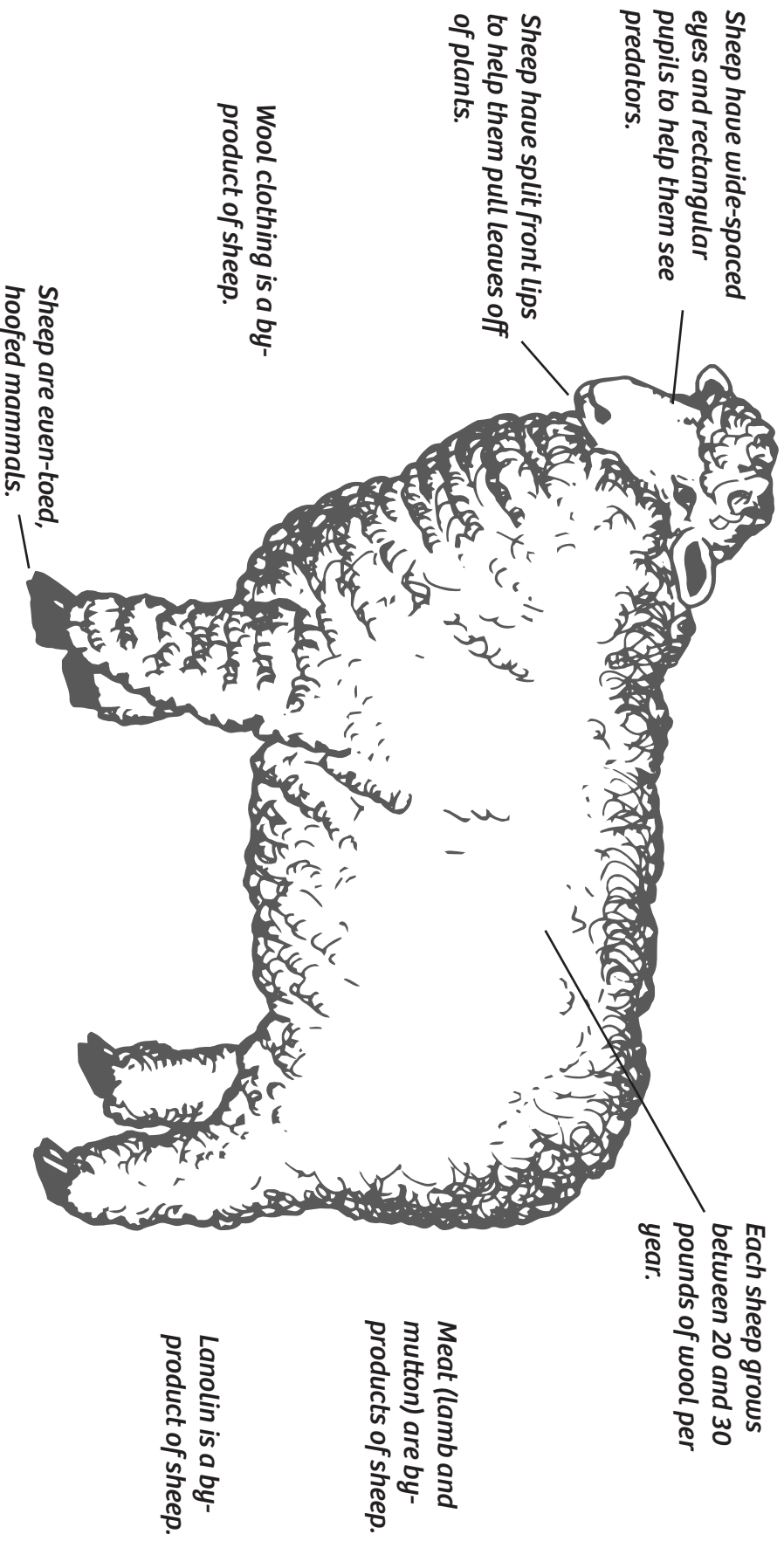


Livestock Characteristics

Sheep

Group Members: Teacher Sample

Directions: Label one internal or external structure that is important to this animal for survival in Wyoming, or a by-product and its use. Your response cannot be the same as another. All structures need to be labeled.



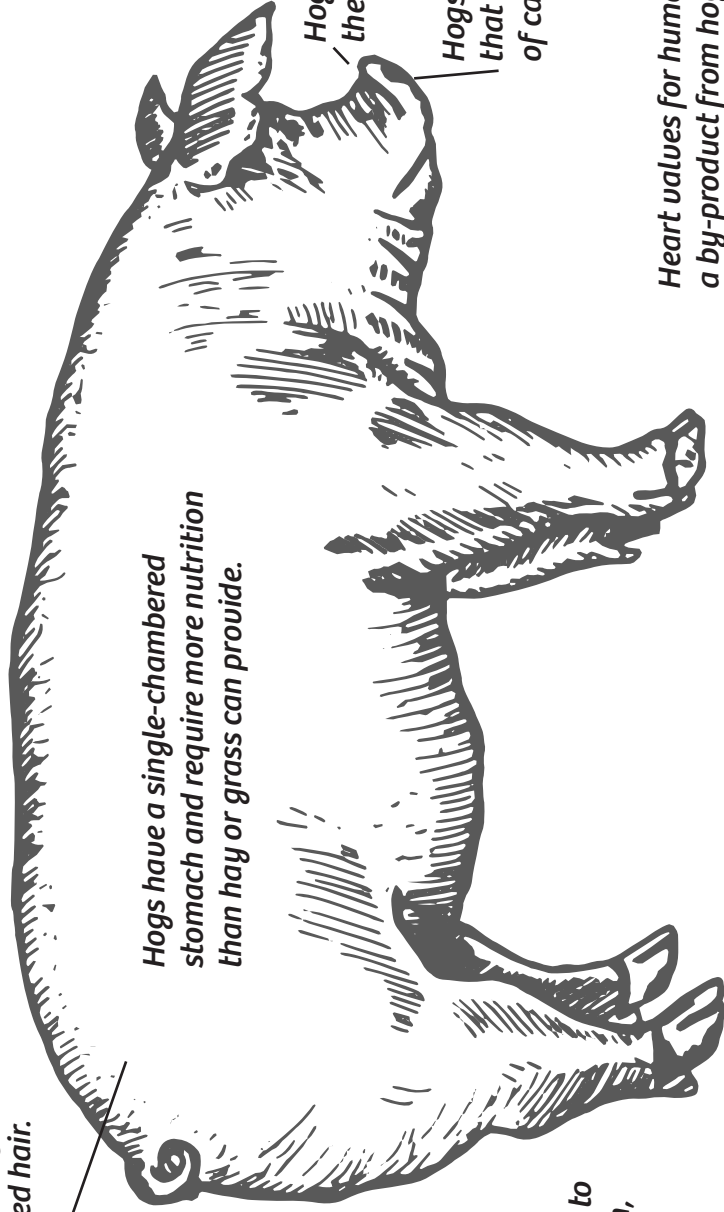
Livestock Characteristics

Hogs & Pigs

Group Members: Teacher Sample

Directions: Label one internal or external structure that is important to this animal for survival in Wyoming, or a by-product and its use. Your response cannot be the same as another. All structures need to be labeled.

Hogs raised in Wyoming have sparse, bristled hair.



Hogs have a single-chambered stomach and require more nutrition than hay or grass can provide.

Hogs have a unique bone in their nose for digging.

Hogs have a blunt upper lip that is a flexible disc made of cartilage.

Hogs wallow in the mud to cool off, prevent sunburn, remove parasites, and prevent bug bites.

Heart valves for humans are a by-product from hogs.

A few by-products from hogs are: sausage, ham, pork chops, bacon, and ribs.



Make A Claim

Select an animal from the cards and make a claim about a structure it has that is important for survival. Support your claim with at least one valid reason.



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Make A Claim

Select an animal from the cards and make a claim about a structure it has that is important for survival. Support your claim with at least one valid reason.



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