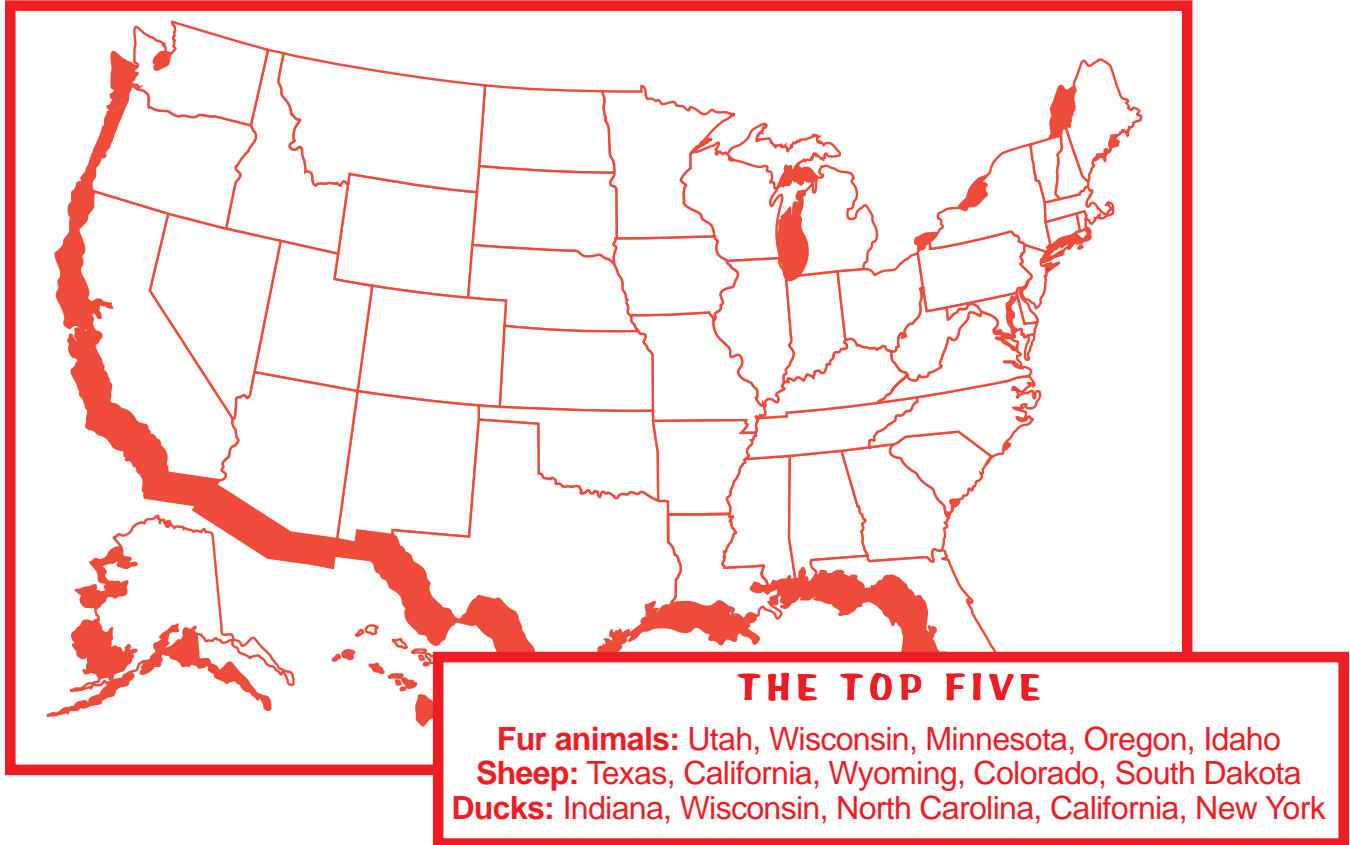


FIRST IN FIBERS

Where do animals for fur, down, and wool come from? Read the box below to see the top five states for each. Put colored dots on

each animal's top five states. Use a different dot color for each animal. You'll get a quick view of the USA's top regions for fur, down, and wool.



1. What do you notice about the locations of the top producing states for each fiber?

2. What do you think makes the states you marked good places to raise fur animals?

sheep? _____

ducks? _____

FIBER FACTS

- The U.S. is the world's leading leather manufacturing country! Cattle are raised in every state.

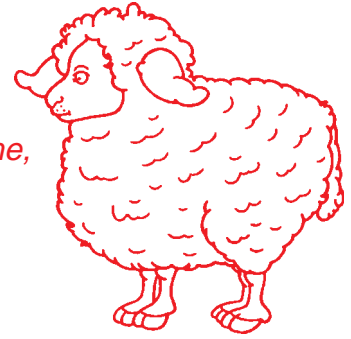
- Some silk is raised in the U.S., but the main producers are China, Japan, India, and southern states of the former Soviet Union. South America is becoming an important grower, too.

LET'S HEAR IT FOR WOOL!

Baa, baa, black sheep, have you any wool?

*Yes sir, yes sir, three bags full. One for my master, one for my dame,
and one for the little boy who lives down the lane.*

Like Mother Goose rhymes, wool has been around for a long time, for good reasons!



DID YOU KNOW?

- An average sheep fleece weighs about 8.5 pounds. It's enough wool for a suit.
- The grease in wool, called lanolin, is used in cosmetics and hand creams.
- Wool is a renewable resource.

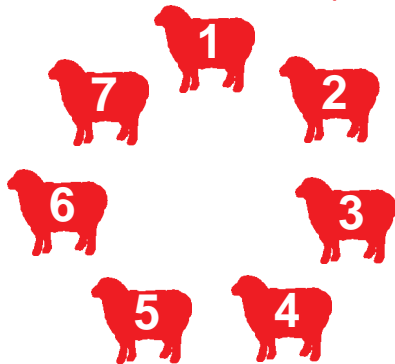
CHEERS FOR SHEARERS!

Shearing is the process where the fleece, or wool coat, is shaved off the sheep. An expert can shear a live, wiggling sheep in about five minutes, removing the fleece in one piece. The sheep's fleece grows back. In about a year, it can be sheared again. Sheep can be sheared many times in their lives. In fact, sheep must be sheared to remain comfortable and healthy!

FROM SHEEP TO SHIRT ... AND OTHER STUFF, TOO!

Your hair grows back after it's cut, right? So does a sheep's. But that sheep's "hair," or wool, is a fiber that has wonderful uses. So instead of sweeping it up and throwing it away, here's what we do:

Read all the scrambled steps. Search for clues about the correct order of events. Then draw an arrow from each step to the correctly numbered sheep and you'll get the picture.



- Clean wool is carded (combed on rollers with wire teeth) to remove tangles and leftover dirt.
- Wool fabric is made into clothing or household goods.
- Long, soft, carded wool strands are spun into yarn.
- Wool is sorted by type and quality before it goes to the mill.
- Wool yarn is woven on looms or knitted into fabric.
- Finished wool goods are shipped to stores for us to buy.
- When it gets to the mill, wool is cleaned to remove dirt and grease.

THINK ABOUT IT

1. Why do you think shearing usually occurs in spring or early summer?
2. Most sheep are white or black. So how does woolen clothing come in all colors?

FOR MORE INFORMATION CONTACT:



FURRIFFIC!

The fur trade was one of the earliest and most important industries in North America. It began in the 1500's when American Indians traded furs to French explorers for tools, kettles, and other supplies. The demand for furs in Europe led traders to move westward to search for new supplies of fur. In this way, the fur trade played a big part in settling the New World.



DID YOU KNOW?

- No endangered species are used for fur in the U.S. Worldwide laws make it a crime to sell furs from endangered animals.

KEEPING WARM WITH FUR

Human beings have worn fur since the beginning of time. For thousands of years, they used the wild animals around them for food and to provide warm, long-lasting clothing.

But after the Civil War, there were fewer furbearing animals in the wild, and people began raising them on farms. Most of the furs sold in the U.S. today are raised on farms. Mink is the most popular, but many fur farmers also raise fox. Some raise ermine (weasel-like animals whose dark fur turns white in winter). Other farmers raise rabbits, both for meat and for fur.

Mink, fox, and rabbits grown on farms are usually healthier and live longer than those in the wild. Fur farmers protect their animals from enemies and harsh weather. They keep them clean, feed them healthy diets, and fight diseases with good veterinary care.

1. What kinds of clothes have you seen made from fur?

2. Why do many Arctic explorers, Inuits, Laplanders, and others wear fur clothing all year around?

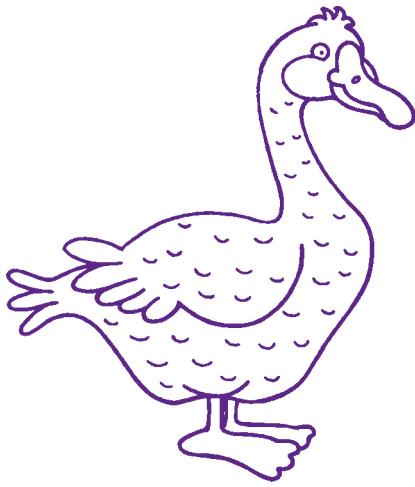
3. When is the main time of the year people wear fur clothing? Why?

Turn your paper over and draw your fashion design for the best possible garment for someone who lives and works in the Arctic winter.

FOR MORE INFORMATION CONTACT:



Fur Commission USA, 826 Orange Avenue #506, Coronado, CA 92118
T: (619) 575-4664; Fax: 575-5578
furfarmers@aol.com
www.furcommission.com



DOWN: SOMETHING TO QUACK ABOUT!

Ducks and geese provide us with the luxury, comfort and warmth to stuff in our pillows, comforters, ski clothes, sleeping bags, and sportswear. The name for this ducky stuff is “down.”

DID YOU KNOW?

- Down is the light, fluffy under-coating beneath the feathers of a goose or duck.
- Down keeps us toasty warm. It's a good insulator. Here's how it works: Down is made of millions of fluffy strands that lock together and overlap. A layer of still air gets trapped in all the fluff. This layer of air holds warmth in and keeps cold out. That's what good insulators do!
- The Federal Trade Commission has rules for labeling down products so consumers know what they are getting. Not all feathers will do! For example, products that contain chicken or turkey feathers may not be labeled as down. Only products that come from ducks or geese may be labeled “down” or “waterfowl feathers.”

TRY THIS: Look for a label on something in your home that contains down or feathers. What does the label say? Share results in class.

GREAT STUFF!

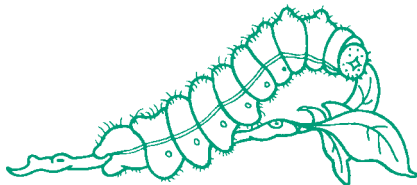
Four items that may contain down are hidden in these sentences. You'll find them if you write down all the bold letters in the order they appear. List the four items below:

1. _____ 2. _____ 3. _____ 4. _____

Meat is the main product **of** duck farms. Down and **feathers** — called plumage — are the most **important** by-products. Down is **washed** along with feathers to get rid of **various insects**, dust, and dirt. The **plumage is all** dried in huge dryers. Then the lighter-weight **down** is separated from the feathers by **powerful** air currents. Down and **feathers will be** mixed again in different **percentages** depending on how they will **be** used and sold. Down is **great** stuff!

FOR MORE INFORMATION CONTACT:

American Down Association
3216 Eastwood Road
Sacramento, CA 95821
T: (916) 971-1135
Fax: (916) 971-3151



S-I-L-K-Y!

What would you do if you found a cocoon in your cup of tea? Throw it out? Think again! Folktales say the wife of a Chinese emperor discovered silk about 5,000 years ago. Seeing a thread unwind from a cocoon that had fallen into a cup of hot tea, she worked with the threads until she found a way to weave them into cloth — and that's how we first got silk!

DID YOU KNOW?

- Silk is produced by most moth caterpillars, but the finest silk comes from the large white moth caterpillar commonly called the silkworm.
- Adult silkworm moths do not eat. They live only a few days, long enough to mate and lay 300 to 500 eggs.
- The larval stage for a butterfly or moth is called a caterpillar. The pupa stage in moths is called a cocoon. The pupa stage in butterflies is called a chrysalis.

FROM SILKWORM TO SILK

Did you ever wonder where silk comes from? It's remarkable! Silkworm larvae (caterpillars) raised by silk farmers spin the fine threads used to weave silk cloth. Silkworms take a lot of care. On many farms, the eggs are collected after they're laid and kept in a cooler all winter. In spring, the eggs are carefully warmed in an incubator. Tiny silkworms hatch from the eggs. For about five weeks they are fed fresh leaves from mulberry trees. Then the fully grown three-inch worms crawl into small wooden houses made by the farmer. The caterpillar spins a 1,000-foot-long silk thread around its body to form a tough silken case. On a silk farm, most of the cocoons are placed in ovens before the adult moth comes out of the cocoon. Farmers do this to prevent breaking the cocoon, which would ruin the silk thread. (A few pupae are allowed to become adults to breed and produce more eggs.) The cocoons are soaked in hot water to loosen the silk fibers, much like the cocoon in the Chinese lady's teacup. The fibers from many cocoons are twisted together to make a strong thread. The threads are woven into silk cloth. Silk is smooth, shiny, and soft to touch. It is lightweight and can be dyed in neat colors.

It takes many cocoons to make silk thread. Do this math to figure how many cocoons it takes to make one pound of silk cloth!

$$(326 + 674) \times 20 = \underline{\hspace{2cm}} \text{ cocoons}$$

WHAT'S YOUR ANSWER?

(Write your answers on the back of this page.)

1. Clothing made from silk often costs a lot of money. From the information above, why do you think silk is expensive?
2. Why do many people like to wear silk clothing? Why do you think jockeys wear silk during horse races? (A jockey's colors at a race are even called his or her "silks.")

FOR MORE INFORMATION CONTACT:

Cheryl Kolander
Silkworker's Notebook
Interweave Press, Inc.
306 North Washington Avenue
Loveland, CO 80537



SHARE THE CARE

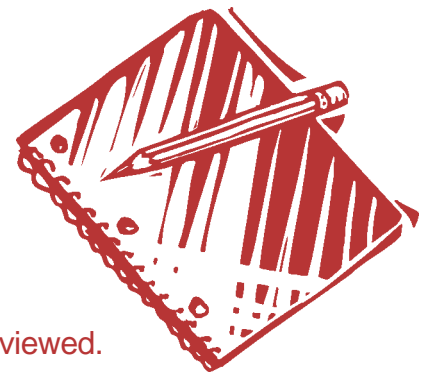
Animals deserve a big thanks for the many good things they bring to our lives. What do we need to give back to them? Animal farmers work hard to make sure their animals are safe, healthy, well fed, comfortable, and relaxed. It's up to all of us to give animals the respect and care they deserve.

TALK TO THE PROS

Interview at least two people who have cared for animals. They could be a

farmer pet owner pet store owner 4-H or FFA member
dog trainer zookeeper animal shelter worker veterinarian
someone who grew up on a farm or any animal caregiver you know.

1. Write a list of questions before your visit.
 - What do you do to take care of animals?
 - What special things do you do to make sure your animals have the best possible care?
 - What happens to the animals if they do not get proper care?
2. Compare what you learn about animal care from each person interviewed.
3. Choose two animals — one you think you could take proper care of and another you know you could not care for well. Using information you learned from your interviews, list what you think each of the two animals needs for good care. Then tell why you could care for the one animal, but would find it difficult or impossible to care for the other.
4. Gather in small groups to share your writing and ideas. Why is it important to show respect for animals through kindness and good care?



FOR MORE INFORMATION CONTACT:

People and groups in your own community:
4-H, FFA, Veterinarians