

WOOL

New Mexico Agriculture

Name _____

Sheep

For 10,000 years they have provided humanity with food and clothing. Sheep were one of the first domesticated animals on earth. They have no natural defense to protect them against predators other than the sheep producers who care for them.

Sheep are gentle creatures. They tend to stay together in groups. They have poor eyesight, an excellent sense of smell and hear very well. Often a lead sheep wears a bell to guide the flock. Their hooves are split allowing them to climb steep inclines if necessary. They have no top front teeth, which permits them to eat vegetation located very close to the ground. Their unique bite also prevents them from pulling up the roots and destroying the lands they graze. Sheep give us food and fiber. The food is called lamb and the fiber is called wool.

Wool comes from sheep. The farmer or rancher must shear the sheep. This means they give the sheep a "haircut." Shearing time is an important time for producers. Sheep are shorn carefully to protect the valuable fleece (the wool) and to protect the sheep. A good shearer can shear 125 sheep a day. In some climates, sheep need shelter after being shorn. However, within a week, their fleeces have grown back to provide them with protection from the weather. The wool is usually about 3 to 3 1/2 inches long.

The 8 to 12 pounds of wool on each animal must be shorn every year to keep the animal comfortable and healthy. The sheep stay cooler in the summer without their heavy coats. Wool fibers have an outer layer of tiny scales. If examined up close you would see they look like a pine cone. These scales keep dirt away from the sheep's skin and keeps the cloth from getting dirty. Wool fibers have the ability to act like coil springs. If pushed together, the wool springs back. Crimps or waves in the fiber trap millions of tiny air pockets within the wool. The layer of air keeps out the cold. Wool fibers act like an umbrella. The fibers are covered with a thin coating which helps keep the wool dry when it rains. Certain parts of the sheep's wool are better for cloth than others.

The fleeces are then bagged and shipped to a warehouse to be sold. Once sold the wool is washed to remove dirt, vegetable matter and grease. The grease is separated from the wash water and purified to produce lanolin, the natural ingredient in cosmetics, creams and lotions. Then the wool is brushed and the fibers are straightened. The wool is then spun into yarn and later knit or woven into woolen fabrics.

Coarser wools produce woolen fabrics often used in carpeting and upholstery. Finer wools produce worsted fabrics such as crepe and gabardine used to make quality suits and dresses. Wool is produced naturally, continually and without chemicals from natural resources. Wool is a pure organic product and is unlike any other fiber in the world. It's naturally durable, resilient and absorbent. Wool is easy to care for.

In a world filled with disposable products and chemical substitutes for nearly everything, the American sheep producers are proud of the high-quality food and clothing they produce from nature's renewable resources.



QUESTIONS

1. Why do some sheep wear bells while in a flock?
2. Why do sheep have split hooves?
3. What 2 main products do we get from sheep?
4. Where does wool come from?
5. How does a farmer get the wool from the sheep?
6. Does a sheep regrow his wool?
7. What is lanolin?
8. Name 4 products that we have as a result of shearing sheep?

SHEEP BY-PRODUCTS

Other parts of sheep such as bones and hooves are used to make many useful items. These other parts are called by-products. Sheep by-products help make the following items:

- | | | |
|------------------------------------|-----------------------|-------------------------------|
| * cellophane wrap | * dice | * paint |
| * instrument strings | * chewing gum | * medicines |
| * creams and lotions | * crayons | * candles |
| * shampoo | * piano keys | * buttons |
| * wallpaper and
wallpaper paste | * insulation | * cosmetics |
| | * nitrogen fertilizer | * biodegradable
detergents |



Sheep Industry

Sheep were one of the first domesticated animals. They provided their herder with his basic needs of food, clothing, and shelter. Columbus brought the first sheep to America. In fact, the sale of wool helped pay his way.

The mother sheep is called a ewe and each year she has 1 to 3 lambs. The father sheep is called a ram.

Once each year before summer, the farmer shears his sheep. Shearing is like giving the sheep a haircut. The wool comes off in one piece which is called the fleece. The wool is then washed, dyed, and spun into yarn to make clothing, rugs, and blankets.

Sheep are also raised to provide meat. The meat from a grown sheep is called mutton and that from a young sheep is called lamb. Lamb is a very popular meat on the east and west coasts of the United States.

ACTIVITY:

The wool industry has added to our language. Try this mix and match activity to learn some of the ways.

1. When a person has a timid or guilty look we say they look _____.
2. March comes in like a lion and goes out like a _____.
3. To fool someone is to _____.
4. We sometimes refer to the Old West as _____.
5. Years ago, a college diploma was sometimes called a _____.
6. If your name is _____, one of your ancestors probably operated a loom.
7. Sometimes we say people are "_____ as a lamb."
8. To go to sleep, some people count _____.

- | | | |
|-----------------------------------|--------------|-------------------|
| A. Lamb | D. Sheep | G. Weaver |
| B. Meek | E. Sheepish | H. Wild and Wooly |
| C. Pull the wool over their eyes. | F. Sheepskin | |





New Mexico Agriculture

Name _____

Learning About Sheep

A female sheep is called a ewe. A male sheep is called a ram. A baby sheep is called a lamb. Sheep grow fluffy wool all over their bodies. Wool keeps them warm and dry. Sheep must have a haircut once a year. This is called shearing. Sheep have split hooves so that they can climb rocky hills. They do not have any top front teeth. The roof of their mouth is hard so that they can eat grass. They are gentle animals and do not bite.

Sheep make a bleating sound. A baby lamb can identify its mother by her bleat. Sheep like to graze. Graze means the sheep eat growing grasses.

Sheep give us food and fiber. The food is called lamb and the fiber is called wool. Wool fiber is used to make clothes.

Answer the following questions about what you have read:

1. What is a ewe?
2. What is a ram?
3. What is a lamb?
4. What does shearing mean?
5. Why do sheep have split hooves?
6. Name one thing sheep eat.
7. How do lambs find their mothers?
8. What products do we get from sheep?
9. What do we use wool for?



Name _____

NM Agriculture

LEARNING ABOUT SHEPHERDS

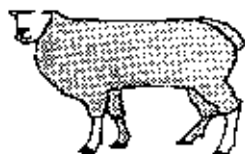
Sheep are raised all over the United States. New Mexico has many sheep. Sheep are raised on farms and ranches. Large sheep ranches often have shepherds—men or women who care for the sheep on the range. Shepherds feed and protect the sheep. If a sheep gets sick, the shepherd helps it get well. Shepherds live alone, often in a tent. Shepherds are nomadic which means they move from place to place with their sheep. They move to find fresh grass for the sheep to eat. Shepherds provide salt blocks for the sheep to lick. They also herd the sheep to water so they can drink.

Often a shepherd has a dog that works with him. Working dogs are very intelligent and work with the shepherd to herd the sheep. They will bark and run around the sheep to make them move. Most young working dogs first learn how to herd sheep by watching their mothers. A dog trainer will also help them learn. Shepherds may have two to three dogs for every 1,000 sheep.

Guarding dogs are used to protect the sheep from wild animals such as coyotes, bears and cougars. Guarding dogs prefer to be with sheep and are very protective of them. Guarding dogs stay with the sheep at night and bark to scare wild animals away.

Answer the following questions:

1. What does a shepherd do?
2. What does nomadic mean?
3. How do the sheep dogs help the shepherd?
4. How does a sheepdog learn to work?
5. Would you like to be a shepherd? Why or why not?



Name _____

DO YOU KNOW . . . there are many environmental and economical advantages to Wool?

1. Wool is biodegradable and can safely break down in approximately five days to five months, depending on climatic conditions.
2. Wool is a great choice for mopping up both marine and land oil spills. Wool soaks up oil while repelling water.
3. Wool can absorb oil at a rate of 16 to 30 times its own weight.
4. Wool can be re-used as many as eight times, and the oil squeezed from the wool can be utilized for normal use.
5. Wool can be used to clean oil from wildlife, such as birds, without removing their natural body oils and fluids.
6. Wool is a natural, replenishing material.
7. Wool is fire-resistant.
8. Wool is produced and manufactured in the USA!



SHEARING: Spring is usually shearing time for sheep. Sheep have their wool removed in one piece called a fleece.

SCOURED: The fleece is washed in big tubs to remove dirt, grease and grass.

CARDING: The clean dry wool is then carded. Carding means to comb the wool to straighten the fibers.

SPINNING: The wool is spun into yarn. Coarser wool is spun into woolen yarn. Finer wool is spun into worsted yarn.

KNITTING/WEAVING: The yarn is knit or woven into fabric.

WOOLEN: Woolen yarn is usually used in carpets or thick sweaters.

WORSTED: Worsted yarn is usually used to make lightweight fabrics for suits and dresses.

WORD SEARCH

There are 12 words here - can you find them?

D A W E A V I N G Z H J

G Z K P W O O L E N H H

R P B S V P M E D I U M

N K P Z M O F K J H P Y

P G B X R C K D Z W W A

W W Q V X Q L X L H S R

O O R Q U K F O U G D N

R O K N I T T I N G H C

S L U N Y C A R D I N G

T C O A R S E F I N E Z

E G P A S P I N N I N G

D S C O U R E D H H G W

CARDING

KNITTING

SPINNING

WOOLEN

COARSE

MEDIUM

WEAVING

WORSTED

FINE

SCOURED

WOOL

YARN

