

## Ag Adventure Lesson Plan

**Subject Area:** Block & Bridle

**Grade Level:** 3

**Learning Center:** Shearing

**Objectives:**

~Students will identify the different uses for sheep.

**Standards:**

**Materials Needed:**

- Clippers
- Plastic bags for wool
- Sheep
- Pen/panels for the sheep

**Personnel Needed:**

- Shearer
- 1 or 2 volunteers

**Lesson Plan**

Instructor:

Students:

**Part 1: What is wool and why do we shear?**

- Describe what the wool looks like on the sheep.
- Explain how shearing works and that it is just like getting a haircut.
- Allow the shearer to give a demonstration of shearing.

-Listen quietly.

-Watch shearer.

**Part 2: What happens to the wool after it is sheared?**

- Explain the steps of cleaning wool.

-Listen quietly.

**Assessments:**

Ask Students:

What is wool?

What is the process to cleaning wool?

**Sources:**

Braun, Diane. "Sheep Wool Cleaning Process." eHow.com. Sept. 8,2012.

## **B&B Shearing Script**

*Please offer this as a guide for the shearer, if they wish to talk to the students. If a volunteer is talking, please follow this script.*

### **Part 1: What is wool and why do we shear?**

Volunteer: Today we are going to talk about wool from sheep and its uses.

Volunteer: First, I would like you to raise your hand if you think know what part of the sheep is the wool? *Wait for students to raise hand, call on a few students and have them point to the body part (s).* Great, you are right. It is the “fluffy” part covering their skin. On some sheep, it can be very soft and smooth and others it will be coarse and thick. It all depends on what breed of sheep it is.

Volunteer: Now, does anyone here get a haircut every now and then? *Let students raise their hands.* Yep, I figured. Why do you get a haircut? It is because your hair gets too long or maybe it is too hot in the summer?

Well that is the same with sheep. We have to give them haircuts otherwise their wool will just keep growing and growing.

The wool acts as insulation for the sheep, much like the insulation in your house! It keeps you warm in the winter! But during the hot summer months, it is very hard for the sheep to keep cool with all that insulation, so that is usually the time when sheep are sheared, or given a haircut.

Volunteer: We have a short demonstration for you to watch. Please remember that they are only getting a haircut, so even if they make noise, it is not because they are getting hurt. Most sheep get nervous around a lot of people so that is what makes them uncomfortable.

*Let students watch the shearer approximately 30-45 seconds then move on.*

### **Part 2: What happens to the wool after it is sheared off the sheep?**

Volunteer: The first step to cleaning wool after it is sheared is to remove the vegetable matter, which is dirt, mud, straw, and other things that can get caught in the wool, especially if the sheep is outside.

Volunteer: Then you follow the same steps as when you take a shower or bath. Get the wool wet in the presoak stage without any soap. Then soak the wool in a tub that has soap in it to finish getting out any dirt that is still there.

Volunteer: After you let the wool sit in the soapy water, take it out and refill the tub with clean, plain water and rinse again twice. To dry the wool, just set it in a dry, sunny place, which is easy in Colorado because it seems to always be sunny here!

Volunteer: Are there any questions?

# Fact Sheet

# Shearing

There are 47 different breeds of sheep in the US.

The amount of wool a sheep produces each year varies between 3-5 lbs. for smaller breeds and up to 20 lbs. for larger long wool breeds.

Cotswold and Lincoln breeds can grow up to an inch of wool a month.

Some breeds need to be shorn twice a year to keep the animal from getting uncomfortably hot.

Texas, California, Colorado, Wyoming, and Utah all produce sheep.

As of Jan. 1<sup>st</sup>, 2012, there were 5.35 million head of sheep in the United States.

In 2011, there were 81,000 sheep farms and ranches in the US.

There are over 1 billion sheep in the world.

China has the largest number of sheep in the world.

In 1996, a sheep named Dolly was the first mammal to be cloned from a somatic cell.

A group of sheep is called a flock.

A sheep has a 300° field of vision which allows them to see almost all the way behind them without having to turn their head.

## References:

Frequently Asked Questions. Nistock Farms, 2003. Web. 13 Sept. 2012.  
<<http://www.nistockfarms.com/cotswold-sheep-questions.html>>.

Fun Sheep Facts for Kids. Science Kids, 21, Aug. 2012. Web. 13 Sept. 2012.  
<<http://www.sciencekids.co.nz/sciencefacts/animals/sheep.html>>.

## Ag Adventure Lesson Plan

**Subject Area:** Block & Bridle

**Grade Level:** 3

**Learning Center:** Spinner

**Objectives:**

~Students will recognize how wool goes to clothing (Farm to plate)

**Standards:**

Social Studies 3.1: Describe producers and consumers and how goods and services are exchanged.

**Materials Needed:**

- Clean wool samples

**Personnel Needed:**

- Spinner  
- 1 or 2 volunteers

**Lesson Plan**

Instructor:

Students:

**Part 1: What products do we get from sheep?**

-Wool is the main product from sheep.  
-Clothing that we wear, is made from wool as well.

-Listen quietly.

**Part 2: What is the process of making wool?**

-Introduce the spinner.  
-Let the spinner explain the process of spinning wool.

-Listen to and watch spinner quietly.

**Assessments:**

Ask Students:

What is the main product from sheep?  
Can we use wool to make clothing?  
Can you list some of the steps to spinning wool?

**Sources:**

Casey, Maggie. "Spinning Basics: How to spin yarn on a wheel". Knitter's Review. Sept 8, 2012.  
*Fast Facts*. American Sheep Industry Association, 2012. Web. 13 Sept. 2012. <[http://www.sheepusa.org/Fast\\_Facts](http://www.sheepusa.org/Fast_Facts)>.

## **B&B Spinner Script**

*Please use this as a guide for the spinner, if they wish to talk to the students. If a volunteer is talking, please follow this script.*

### **Part One: What products do we get from sheep?**

Volunteer: Hello students! Are you all having fun today?! At this station, we are going to talk about one of the main products we get from sheep. Can anyone tell me what this product is? *Allow students to take some guesses and give a few hints. Example: It is right in front of us.*

Volunteer: The main product is wool! That is the fuzzy white “cloud-like” fiber on the sheep. We can shear the wool off of the sheep and make many products from it. I bet some of you have clothing on that is made at least partly of wool. First, we are going to explain the way to take wool from the sheep and make it into clothing.

### **Part 2: What is the process of making wool?**

Volunteer: Let’s watch \_\_\_\_\_ spin some wool and then we will have her/him explain the process. *Introduce the spinner and let them have the floor!!*

*If needed:*

Volunteer: After shearing the wool needs to be processed so we can use it for things like clothing. Spinning is the process that forms yarn. Once the wool is prepared it is run through small rollers which lengthen the wool. Then the spinning machine twists and re-twists the wool. The yarn can have many different qualities including strength and size.

Volunteer: It is necessary to create yarn from the wool so that it can be used to weave or knit.

# Fact Sheet **Spinner**

One pound of wool can make 10 miles of yarn. There are 150 yards (450 feet) of wool yarn in a baseball.

The top wool-producing states in 2010 were Texas, California, Wyoming, Colorado, and Utah.

The average weight of a fleece in the US is 7.3 pounds.

The top 5 wool producing countries: Australia, China, New Zealand, Russia, and Argentina.

Wool is a natural, renewable, fiber that offers a 'green' fabric choice. Wool is also biodegradable making it an eco-friendly product.

Wool is the only fiber that naturally resists flaming.

## References:

*Fast Facts*. American Sheep Industry Association, 2012. Web. 13 Sept. 2012.  
<[http://www.sheepusa.org/Fast\\_Facts](http://www.sheepusa.org/Fast_Facts)>.

*Fun Farm Facts*. Farmers Feed US, 2009. Web. 13 Sept. 2012.  
<<http://www.farmersfeedus.org/fun-farm-facts/>>.

## Ag Adventure Lesson Plan

**Subject Area:** Block & Bridle

**Grade Level:** 3

**Learning Center:** CAM

**Objectives:**

- ~Students will learn the history of CSU (Colorado A&M).
- ~Students will identify the different uses for sheep.
- ~Students will discern the differences between ram, ewe, and lamb.

**Standards:**

Life Science 3.2.1: The duration and timing of life cycle events such as reproduction and longevity vary across organisms and species.  
History 3.1.2: Give examples of people and events and developments that brought important changes to a community or region.

**Materials Needed:**

- Colorado A&M poster
- CAM, the ram

**Personnel Needed:**

- 1-2 Volunteers

**Lesson Plan**

Instructor:

Students:

**Part 1: CAM and History of CSU**

- Ask students to raise their hand if they know what the CSU mascot is.
- What is the mascot's name?
- Explain the meaning of CAM and that CSU is a land-grant university.

- Raise hands to answer.

- Listen quietly.

**Part 2: What is a ram?**

- Ask students if CAM is a boy or girl.
- Tell students what a ewe and lamb are.

- Answer as a group.

**Part 3: What are the different uses for sheep?**

- Explain that rambouillet sheep are used for wool.
- Give other examples of sheep use:  
Meat and fertilizer

- Listen quietly.

**Assessments:**

Ask Students:

What is the CSU mascot?

What does CAM mean?

What is a boy sheep called? What is a girl sheep called? What is a baby sheep called?

What are different uses for sheep?

**Sources:**

Colorado State University website

<http://www.alumni.colostate.edu/Students/PrideandTraditions/tabid/82/Default.aspx>

ANEQ 101 Food Animal Science Lecture notes. Dr. Kraig Peel

## **B&B CAM Script**

### **Part 1: CAM and History of CSU**

Volunteer: Does anyone know what the CSU mascot is? *Hint: It is standing in front of you!*

*Let the students take a few guesses.*

Volunteer: Your right! It is a ram. Does anyone know what his name is? *Call on 1-2 students and have them answer the question.*

Volunteer: His name is C.A.M. *Spell it out so the students can know what letters are in the name.* Everyone knows that our college is called CSU- Colorado State University, but in 1944, the college used to be called Colorado A&M. That stood for Colorado Agricultural and Mechanical College.

Volunteer: CSU is a land-grant university which means that public land was given to the state to build the college.

### **Part 2: What is a ram?**

Volunteer: Does anyone know if CAM is a boy or a girl? *Let the students take some guesses then give them the answer.*

Volunteer: CAM is a boy, so that is why we call him CAM, the RAM. Girl sheep are called ewes. Does anyone know what we call baby sheep? *Allow one or two students to answer.* That is right, they are called lambs.

Volunteer: There are many different kinds of sheep too. CAM is a breed of sheep called a rambouillet

### **Part 3: What are the different uses for sheep?**

Volunteer: Rambouillet sheep are known for the wool that comes off of their body. Can anyone tell me what we can make with wool? *Take some guesses, then list wool products.*

*Clothes, blankets, insulation....*

Volunteer: There are other uses for sheep too! Some people like to eat lamb meat, which is very tender and juicy. We can also raise sheep for the manure they produce and use that as fertilizer on our gardens and farm fields.

Volunteer: Are there any questions?



# Fact Sheet CAM

Colorado State University's history goes back to 1870 and was founded as the Agricultural College of Colorado.

CAM stands for Colorado A&M.

CSU first opened its doors to students in 1879 with President Elijah Edwards and two faculty members.

The university has approximately 1,550 faculty members in 8 colleges and 55 academic departments and boasts more than 170,000 living alumni.

Money Magazine ranked Fort Collins as the sixth "Best Place to Live" in America in 2010.

CAM is the Ram is the 23 ram is CSU history.

Sheep have 8 teeth on the bottom of their mouth and none on top!

Sheep eat alfalfa, hay, grass, corn, oats, and other plants.

Sheep are ruminants (like cows) and have a 4 compartment stomach!

CAM's breed is Rambouillet, is cared for by students known as Ram Handlers and is supported by the Alumni Association.



## References:

*CAM the Ram*. CSU Alumni Association, 2012. Web. 13 Sept. 2012.

<<http://www.alumni.colostate.edu/Students/PrideandTraditions/CAMtheRam/tabid/530/Default.aspx>>.

*The Story of Colorado State University*. Colorado State University, 2012. Web. 13 Sept. 2012.

<<http://www.colostate.edu/features/history.aspx>>.