



Name: _____ ODD Period: _____

Week: 36-37

Dates: 5/2-5/13

Unit: Beef, Sheep and Record Books

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
2 O *LIBRARY- AET RECORD BOOKS 12:30-2PM	3 E	4 O *BEEF NOTES	5 E *FFA AWARDS RECEPTION 6PM OLD MISSION SANTA INES	6 O *SHEEP NOTES *INJECTION LAB
9 E	10 O *STUDY GUIDE *AET RECORD BOOKS- SIA *SECTIONAL OFFICER SCREENING 4:30PM	11 E	12 O *UNIT QUIZ *PACKET DUE *SAE PRINTED, SIGNED AGREEMENT DUE	13 E *CLEMENT GONE
16 O *LIBRARY- AET RECORD BOOKS 12:30-2PM *STUDY FOR FINAL	17 E	18 O *AET RECORD BOOK DUE BY END OF PERIOD *STUDY FOR FINAL *LIBRARY 12:30-2PM	19 E	20 O *STUDY FOR FINAL *LAST DAY FOR LATE/ ABSENT WORK DUE BY 2PM *CLEMENT GONE
23 E FLEX DAY	24 FINALS 1,3,7	25 FINALS 2,4	26 FINALS 5, 6	27 NO SCHOOL GRADUATION

ASSIGNMENT	YOUR SCORE	TOTAL POINTS POSSIBLE
BEEF NOTES		60
SHEEP NOTES		40
INJECTION LAB ACTIVITY		40
STUDY GUIDE		40
TOTAL		180

AG EARTH SCIENCE FACT OF THE WEEK

THERE ARE OVER 94 MILLION HEAD OF BEEF CATTLE BEING PRODUCED BY 1 MILLION BEEF PRODUCERS IN THE U.S. OF THESE OPERATIONS, 97 PERCENT ARE FAMILY-OWNED.

THERE ARE OVER 40 BREEDS OF SHEEP IN THE U.S. AND APPROXIMATELY 900 DIFFERENT BREEDS AROUND THE WORLD. THE NAVAJO CHURRO IS THE OLDEST BREED OF SHEEP IN THE U.S.

CATTLE

Vocabulary

_____ - an intact (uncastrated) male beef animal

Heifer- a female beef animal that has not given birth

Steer- a castrated male beef animal primarily used to produce meat

Cow- a female beef animal that has given birth

Weaning- when the calf is separated from the cow and begins to eat grain

Historical Development

Cattle first domesticated 8-9000 years ago

Two species

Bos indica humped Zebu cattle of India/Africa

Large dewlap and _____

Resistant to heat and some diseases

Bos taurus more temperate climates

Hereford, Shorthorn, Angus

Cattle in North America

Spanish imported first cattle in _____

Father Kino imported cattle into Arizona territory in 1691

Into California in 1769

By 1834 mission cattle totaled 400,000 head

Used for hides and tallow

1860-1890

Cattle were found in large number in South but market in east

Cattle drives and cow towns

Manure was valuable product

_____ and packing plants in Midwest

Sever winter mortality

1882, 1889 and 1890

End of the open range -> barbed wire invented 1873

Production into 20th Century

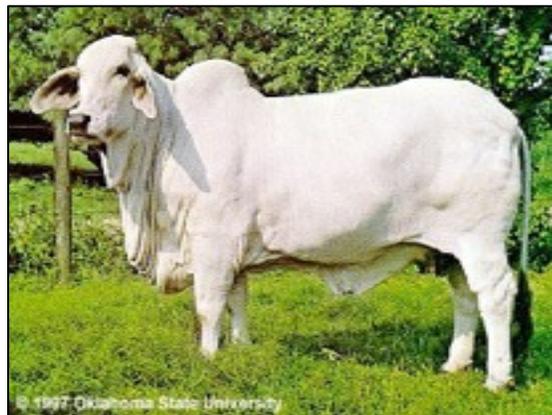
Continued movement of feeding centers to west then into Midwest

Current feeding centers

Eastern New Mexico

Texas and Oklahoma panhandles

Packing centers in high plains



Production Segments in Beef Industry

Segment	Product	Economic Issues
Seed stock	Breeding stock	Genetic traits
Cow-calf		%calf crop Weaning wt
Feeders	Slaughter cattle	ADG Feed efficiency



Production cycle

- Most calves are born in spring (forage)
- Cow must calve annually
- Time of calving determined by breeding
- Calves weaned in fall
- Shipped to stockers (pasture)
- Directly to feedlot
- Production cycle
- Feedlot cattle fed to finish weight
- Non fed cattle product 25% of beef in United States
- Cull beef cows, bulls, dairy cows

Common Health Problems

- Calves
 - Loss at calving
 - Neo-natal diarrhea
- Growing stock
 - Bovine respiratory disease complex
- Mature cattle
 - Reproductive Failure
 - Nutrition
 - Sudden Death



Beef Statistics

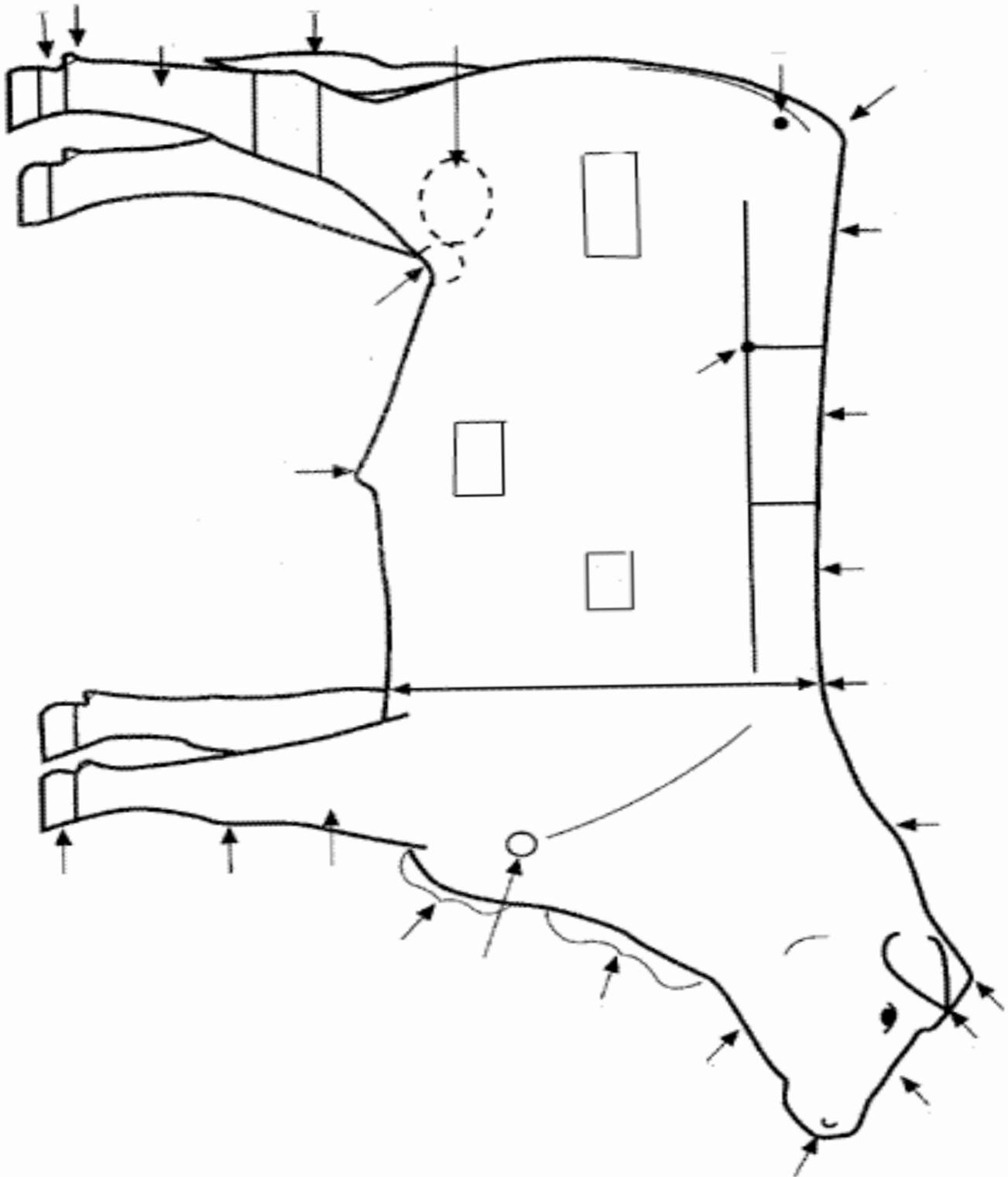
The U.S. beef industry is worth an estimated \$175 billion with cattlemen conducting business in all 50 states and operating 800,000 individual farms and ranches.

The United States produces nearly 25 percent of the world's beef supply according to 2002 USDA data.

There are 1.4 million jobs attributed to the beef industry.

The cattle industry is a family business. Eighty percent of the cattle businesses have been in the same families for more than 25 years; 10 percent for more than 100 years.

Beef is the number one protein in America according to USDA consumption data. In 2002, the average per
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SHEEP

Vocabulary

Ewe- A female sheep is called a ewe.

Ram- A male sheep is called a ram.

_____ - A baby sheep is called a lamb. It's a lamb until it is one year old.

Flock- Sheep live in groups called flocks.

Wool- The natural fiber produced by sheep.

Shearing - Sheep are sheared of their wool in the spring.

Fleece - The wool is removed from the sheep in one piece, called a fleece.

History of Sheep

Today's sheep descend from _____ sheep (Mouflon) of Asia and Europe

Sheep are a source of fiber and meat

Sheep were first domesticated about 10,000 years ago

People used wool as much as 20,000 years ago

Wool

Sheep have been bred to produce finer wool _____

People in Iran began selective breeding of sheep for finer wool 6,000 years ago

Fine wool sheep breeds of today originated with the Spanish Merino, developed more than 1,200 years ago

Introducing Sheep to the World

_____ and other Europeans carried sheep to the New World

Spanish missionaries introduced to sheep to Native Americans in Mexico

Sheep are an important part of Navajo culture

The Navajo word for sheep translates to "that by which we live"

Merino sheep were imported to New England in 1793

During the next 20 years, demand for the Merino spread across the Northeastern U.S.

Sheep in the U.S.

With the development of _____ fibers in the 20th century, the sheep industry has declined

Sheep and lamb population peaked at 56.2 million in 1942

1996- the sheep and lamb population had declined to 8.4 million

2001- 66,000 sheep producers in the U.S. were raising 6.9 million sheep and lambs

Breeds of Sheep

1,000 distinct breeds of sheep, with _____ breeds in North America

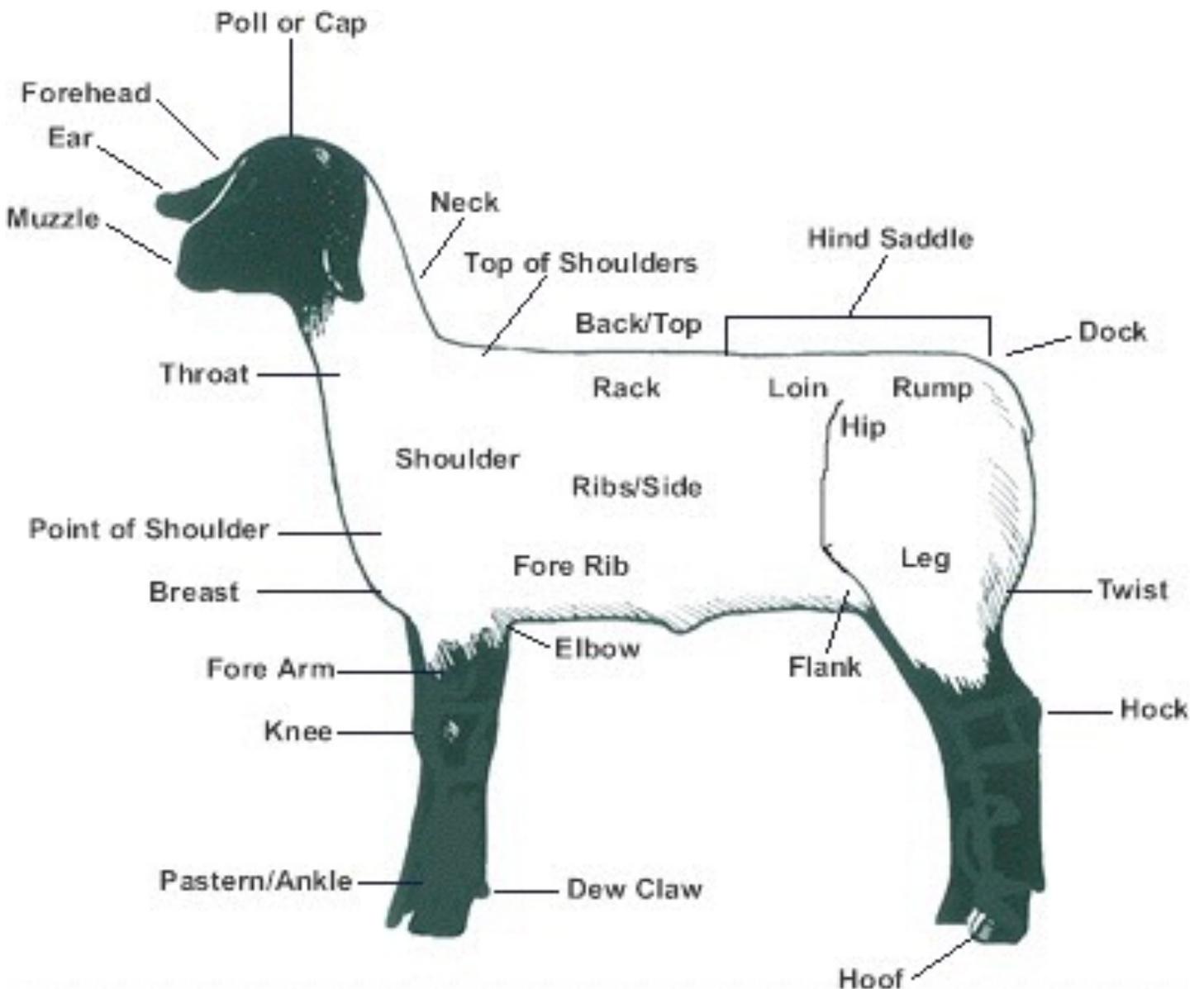
Many of these breeds are rare and some are in danger of extinction

In the U.S., four breeds account for more than two-thirds of the sheep population

Sheep are raised for wool and meat; some provide milk for cheese-making

Breeds can be classified according the type of wool they produce:

- Fine wool
- Medium wool
- _____ wool
- Crossbred wool
- Hair sheep



GIVING AN INJECTION

Intra- Muscular Injection Demonstration	
Steps	Key Points
1. Choose the correct medication/ supplement and read <u>ALL</u> of the directions and warnings	<p>A. Read if appropriate for animal type and animal purpose (think about withdrawal period)</p> <p>B. Read if appropriate for symptoms</p> <p>C. Determine the dosage based on animals weight and type</p>
2. Determine the size of the syringe and needle	<p>A. Determine the size of syringe and needle depending on dosage and viscosity of the medication/supplement</p> <p>b. Use clean, sterile equipment</p> <p>(6mL syringe, 20 gauge needle)</p>
3. Attach needle to syringe	<p>A. Remove short end cap off of the needle and gently twist onto syringe. Leave needle cover on until ready to use.</p>
4. Insert needle into the rubber cap of medication/supplement	<p>A. Remove needle cap carefully</p> <p>B. Draw air into the syringe and inject the same volume of air into the bottle as the volume you plan to take out of the bottle to equalize the pressure. Failure to do so will make it difficult to withdraw the contents of the vial or bottle.</p> <p>B. Hold medication/supplement upside down, with needle inserted into rubber cap</p>
5. Withdrawal the appropriate medication/supplement	<p>A. After filling the syringe with the product to be injected, point the syringe upwards and tap the barrel with your finger to make air bubbles move upwards into the syringe tip.</p> <p>B. Slowly and carefully push the plunger to eject the air bubbles from the syringe before injecting the product.</p>
6. Insert needle into muscle tissue and inject medication/supplement	<p>A. Give IM injections deep into a muscle. Use a needle long enough to penetrate skin, subcutaneous tissue and fat to reach the muscle. The needle should enter the skin perpendicular to the skin surface. Make sure animal is properly restrained.</p> <p>B. Slowly inject medication/supplement</p> <p>C. Withdraw the needle carefully</p>
7. Make a record of the injection	<p>A. Record date, dosage and any other appropriate notes.</p>

PARTNER SIGNATURE: _____

BEEF AND SHEEP STUDY GUIDE

Flock-

Ewe-

Sheep are used for...

The sheep industry has declined because...

Majority number of sheep breeds in the US ____.

Three different types of injections...

Describe Bos Indica characteristics.

Bull-

Heifer-

Steer-

SAE PROJECT REQUIREMENTS

All students enrolled in an agriculture class at Santa Ynez High School must complete an SAE project. SAE is 5% of your grade. Here are the requirements:

- *SAE must be an agriculture related work experience or project approved by instructor
- *Must be able to earn work experience hours or money doing this project
- *Must have a minimum of 10 hours working on this project before the end of the semester. Ask your instructor for the official due date.
- *Students who have continuous projects throughout the year are eligible to carry over hours from one semester to another.
- *The project you choose to do in FFA must be different than a project you may have in 4H. Those of you interested in science may choose to complete an agriscience research project instead. If you are interested in helping around your home, you may do a Home Improvement project (see sample Business Agreement for guidance).

WHAT DO I HAVE TO TURN IN?

1. Updated online record book for the current calendar year (January- December)
 - Set-Up
 - Profile: SAE Project Set Up
 - Profile: SAE Agreement
 - Profile: Budget
 - Journal- SAE Hours
 - Journal- FFA Activities
 - Journal- Community Service (5 pts max)
 - Portfolio with pictures and captions

WHEN IS THIS ALL DUE?

Requirement	EVEN PERIODS	ODD PERIODS
Printed and signed SAE Agreement	Due May 13th	Due May 12th
AET Record Book (completed online, nothing printed)	Due May 19th	Due May 18th

AET RECORD BOOK SCORE CARD

NAME: _____

Period: _____

Your Points	Points Possible	Item	Directions
	5	Set-Up	AET profile is set up with correct personal, demographic and class information (Example: Ag Earth, Veterinary Science)
	5	Profile: SAE Project Set Up	Student has a valid SAE project set up in their Profile: Experience Manager (SAE)
	50	Profile: SAE Agreement	Has at least one printed, signed SAE agreement from the Profile: Experience Manager (SAE) submitted to instructor by assigned decline.
	10	Profile: Budget	If applicable , student has a completed budget relating to their SAE Project in Profile: Experience Manager (SAE)
	100	Journal- SAE Hours	Shows 10 hours or more of SAE work/project experience entered correctly in the journal
	20	Journal- FFA Activities	Includes any activities that they have participated in THIS calendar year in (need at least 2): FFA activities, meetings, conferences, competitions, public speaking etc
	5	EXTRA CREDIT: Journal- Community Service (5 pts max)	Includes any community service that they have done in THIS calendar year
	60	Portfolio	<ul style="list-style-type: none"> •A minimum of 3 pictures demonstrating 3 different skills pertaining to the project(s) must be uploaded to AET •Student should be visible in all pictures •Each picture must have a 2 sentence caption describing the skill/activity shown in the photo
	250	TOTAL SCORE	