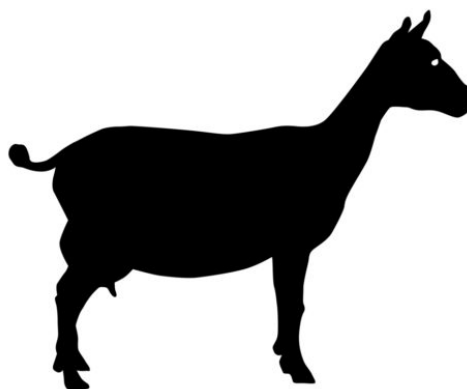


2023 Goat Skillathon Materials



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

trumbull.osu.edu

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Meat Cuts or Mammary Structure (15 points) (depending on meat or dairy project exhibited)

Novice/Junior-

Meat- All five wholesale cuts of chevon (3 pts each; 15 total pts)

Dairy- All four labels of the following on the goat mammary structure (attachment): Fore Udder & rear udder attachment. (4 pts each; 15 total pts)

Specialty- All four goat feet & leg structure (part II) (4 pts each, 15 total pts)

Intermediate-(2 pts each, 15 pts if all correct)

Meat- 7 retail cuts **Dairy-** Select and place **7** of the labels included in the goat mammary structure posters (Teat & Attachments).

Specialty- Select and place **7** labels of the goat feet & leg structure posters (Part 1 and II) or the topline structure poster.

Senior-

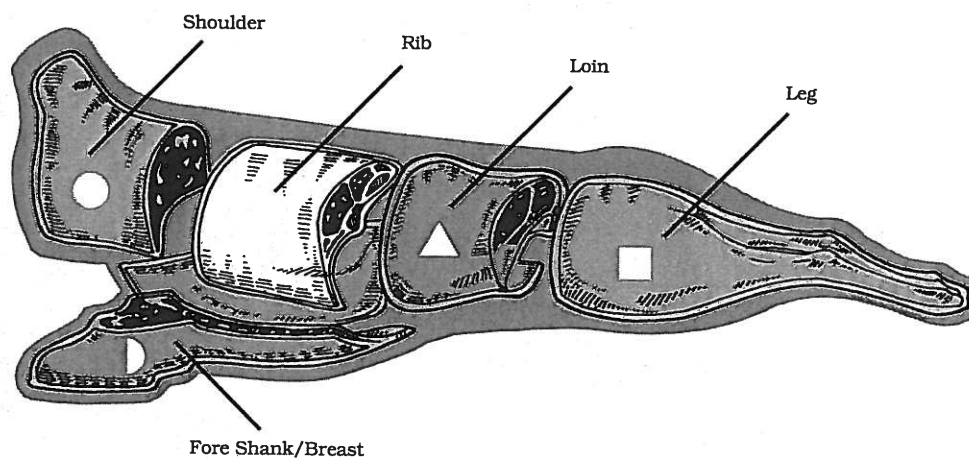
Meat- All five wholesale cuts of chevon and 10 retail cuts.

Dairy- All fifteen labels included in the goat mammary structure posters (Teats & Attachments)

Specialty- All ten labels of the goat fee & leg structure posters (Part I and II) and five labels of the goat topline structure.

Use this poster in conjunction with Match the Labels to the Correct Wholesale Cuts of Chevon situation/task statement and identification tags.

Wholesale Cuts of Chevon



Retail Cuts of Chevon



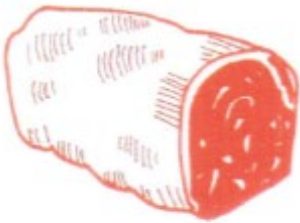
ARM CHOP



FORE SHANK



BREAST



ROLLED SHOULDER



BLADE CHOP



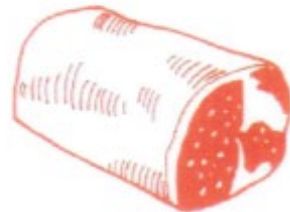
RIB ROAST



CHOP



LOIN CHOP



LION ROAST



LEG



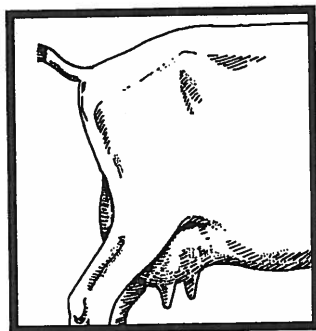
ROLLED LEG



STEWED, CUBED

Goat Mammary Structure (Attachments)

Fore Udder Attachments

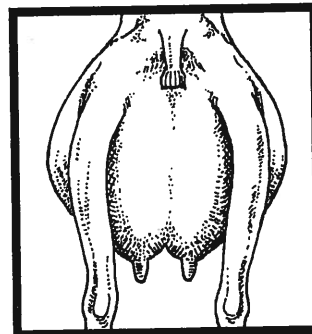


Ideal

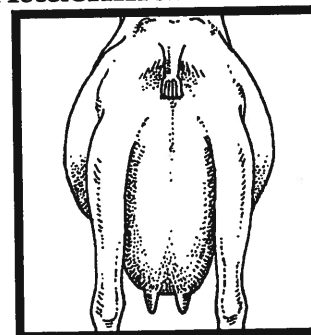


Broken

Rear Udder Attachments

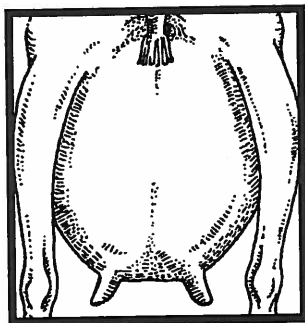


Ideal

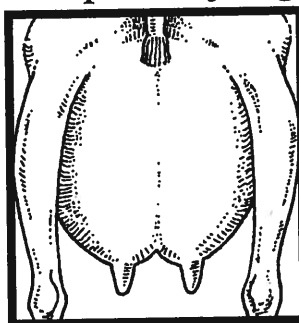


Broken

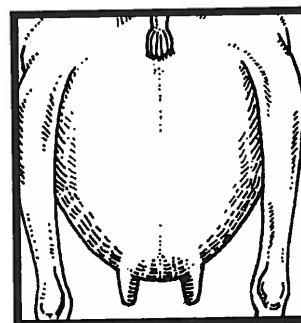
Medial Suspensory Ligaments



Broken



Ideal



Weakened

Use this poster in conjunction with Goat Mammary Structure (Attachments) – Match the Correct Structural Names with the Corresponding Diagrams situation/task statement, and identification tags.

Goat Mammary Structure (Teats)



Bottle-Shaped Teats

Spur Teat

Double Teats

Teats that Point
Sideways



Pencil-Shaped Teats

Uneven Teats

Extremely Small Teats

Ideal Teats

Use this poster in conjunction with Goat Mammary Structure (Teats) – Match the Correct Structural Names with the Corresponding Diagrams/situation/task statement, and identification tags.

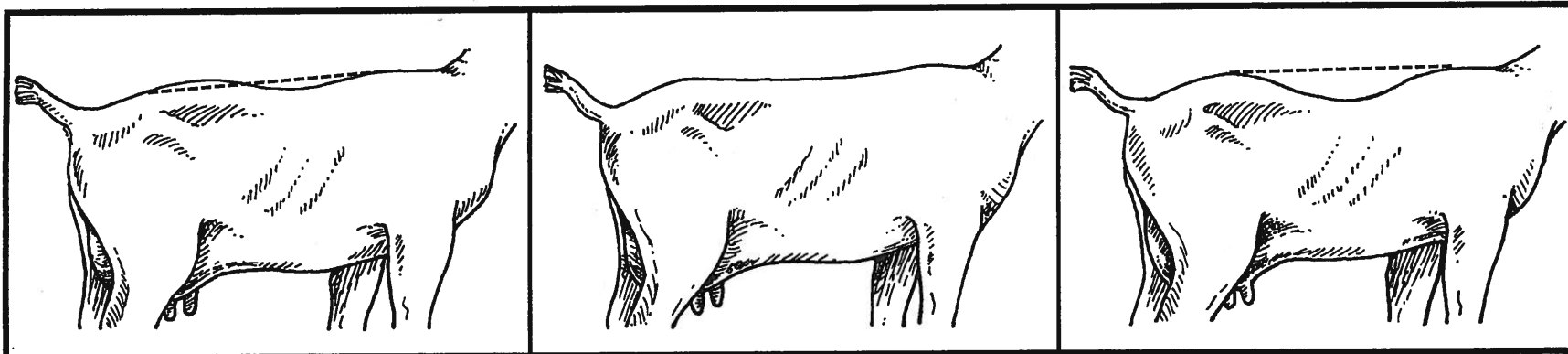


Exploratory Learning: Educational Program

This component adapted from materials in the *Dairy Goat Journal*, Helenville, WI

Product distribution through the Curriculum Materials Service

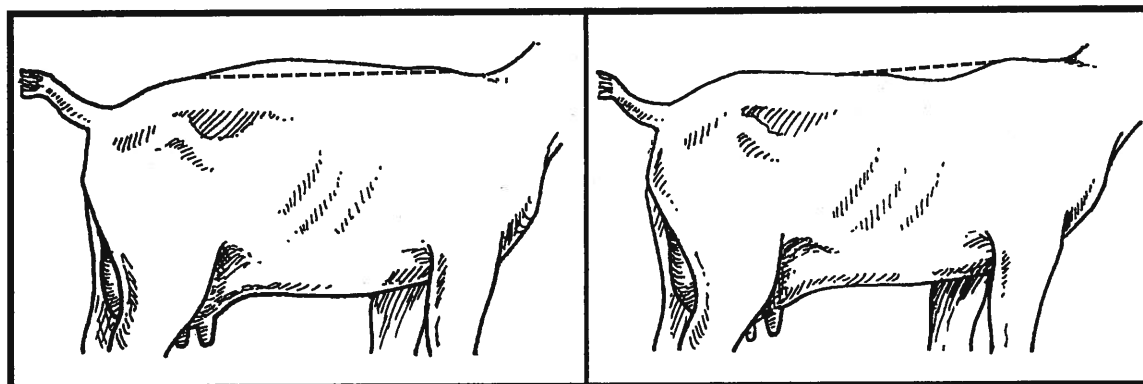
Goat Topline Structure



Wavy Back

Ideal Back

Sway Back



Roached Back

Weak in the Chine

Use this poster in conjunction with Goat Topline Structure –
Match the Correct Label with Each Topline Structure situation/task statement and identification tags.



Exploratory Learning: Educational Program

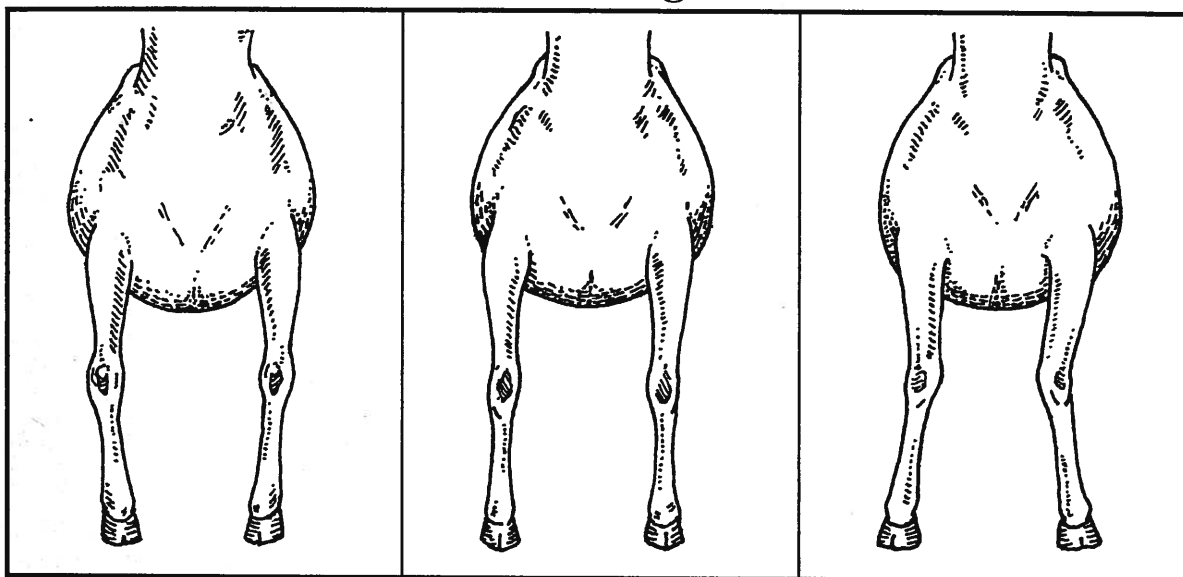
This component adapted from materials published in the *Dairy Goat Journal*, Helenville, WI

Product distribution through the Curriculum Materials Service

Use this poster in conjunction with Goat Feet and Leg Structure – Identify the Structural Variations in the Following Areas: the Side and Rear Profiles of the Rear Legs, and the Front Legs situation/task statement and identification tags.

Goat Feet and Leg Structure (Part I)

Front Legs

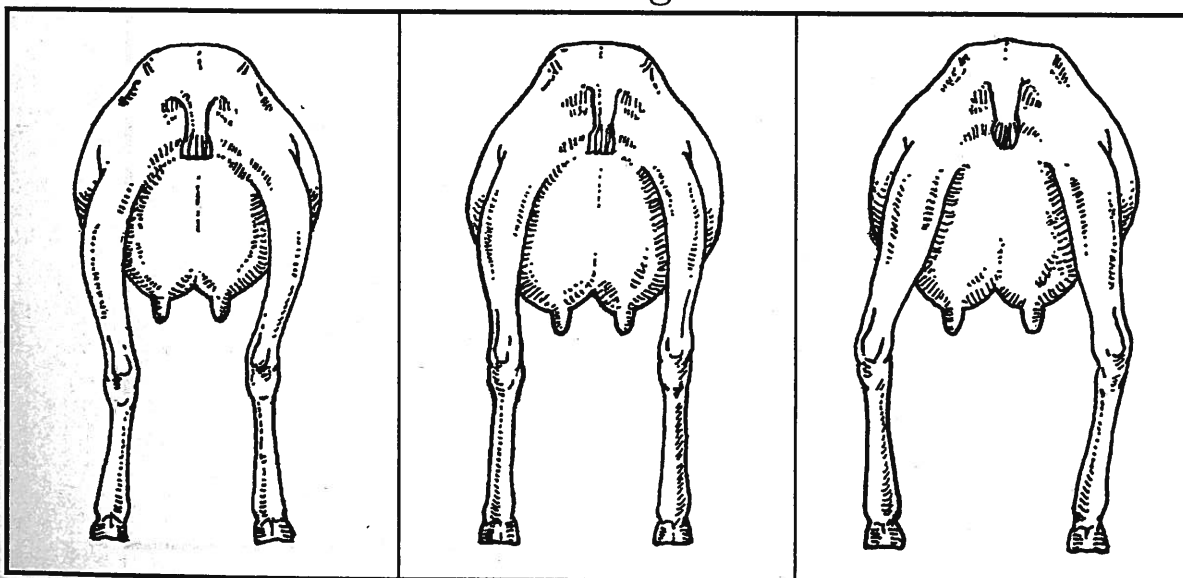


Buckled Knees

Ideal

Knock-Kneed

Rear Legs



Close at the Hocks

Ideal

Bowlegged



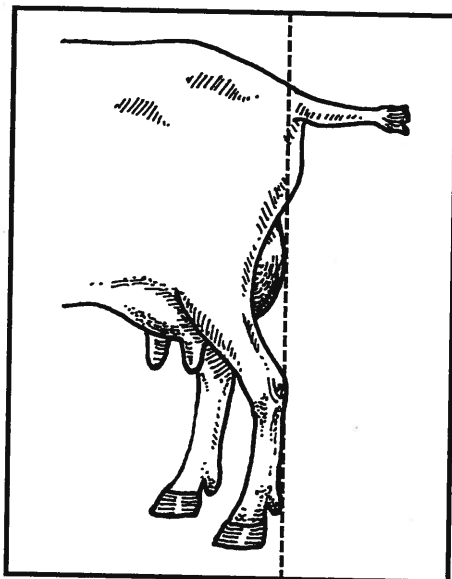
Exploratory Learning: Educational Program

This component adapted from materials published in the *Dairy Goat Journal*, Helenville, WI

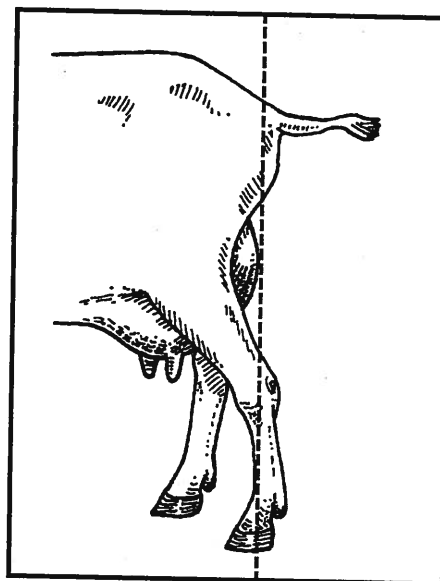
Product distribution through the Curriculum Materials Service

Use this poster in conjunction with Goat Feet and Leg Structure – Identify the Structural Variations in the Following Areas:
the Side and Rear Profiles of the Rear Legs, and the Front Legs situation/task statement and identification tags.

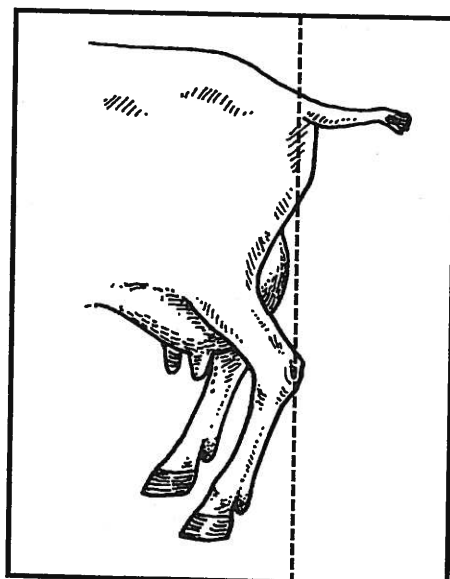
Goat Feet and Leg Structure (Part II)



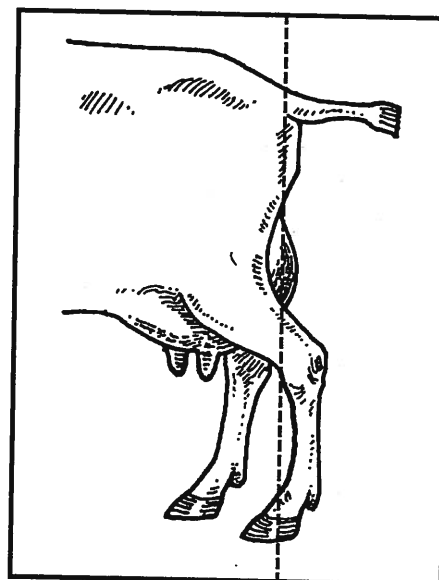
Ideal Rear Legs



Post-Legged



Sickle-Hocked



Weak Pasterns



Exploratory Learning: Educational Program

This component adapted from materials published in the *Dairy Goat Journal*, Helenville, WI

Product distribution through the Curriculum Materials Service

NOVICE/JUNIOR

Label 10 kinds of feed using name labels 10 points

Name 2 signs of the following 2 points each

Enterotoxemia - (diarrhea , abdominal pain and bloating)

Urinary Calculi - (straining to urinate , dribbling urine and kicking belly)

Bloat - (loss appetite , bulging hard stomach on left side , respiratory distress, grinding teeth , kicking belly)

What is a ruminant ? Animal with four stomachs 4 points

INTERMEDIATE

Name 10 kinds of feed. Using NO labels 10 points

Answer a question on protein amounts from feed tag 2 points

Name a sign and cause of following 2 points each

Enterotoxemia - (diarrhea , abdominal pain and bloating)

Overeating , lush grass and grain

Urinary Calculi - (straining to urinate , dribbling urine and kicking belly)

To much Phosphorus in diet

Bloat - (loss of appetite , bulging hard stomach on left side , respiratory distress , grinding teeth, kicking belly)

Eating to much lush grass or grain or getting something stuck in throat

What is a ruminant ? Animal with four stomachs 2 points

SENIOR

Name 10 kinds of feed . Using NO labels 6 points total

Answer 2 random questions from feed tags 1 point each , 2 points total

Name a signs , causes and treatment of the following 3 points each

Enterotoxemia - (diarrhea, abdominal pain and bloating)

Overeating , lush grass and grain

Call vet—More of prevention CDT shot gradual feed changes

Urinary Calculi - (straining to urinate , dribbling urine and kicking belly)

To much Phosphorus in diet

Call vet remove calculi surgically, use feed with Ammonium Chloride in it

Bloat - (loss of appetite, bulging hard stomach on left side , respiratory distress , grinding teeth , kicking belly)

Eating to much lush grass or grain or getting something stuck in throat

Oral Blot Release , Rubbing goats sides and putting front feet higher to release gas. Call vet to tube with mineral oil

Know 3 kinds of bloat 1 point each total of 3 points

CHOKER - something stuck in throat

DRY - gas forms in pockets and is trapped in upper portions of Rumen

FROTHY - foam forms in Rumen with tiny bubbles that are impossible to belch up.

example questions
How much copper in feed
Do the feed medicated.
How much crude fat.
Feeding instructions

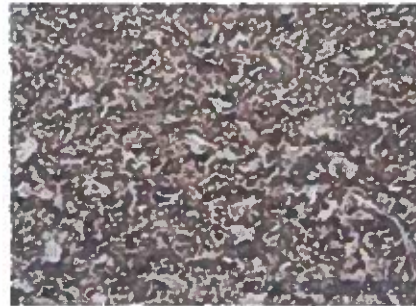
TYPES OF FEED



Textured



Alfalfa Pellets



Beet Pulp



Cracked Corn



Pellets



Rolled Oats



Oats



Shelled Corn



White Salt



Trace Mineral Salt

PURINA®

GOAT GROWER 16 DQ.0015

MEDICATED

Type C Medicated Feed
COMPLETE FEED FOR GROWER GOAT
For the prevention of coccidiosis in young goats caused by *Eimeria*
christianseni and *E. ninakohlyskimovae*.

ACTIVE DRUG INGREDIENTS

Decoquinate.....0.0015 %
(6.8 mg/lb)

GUARANTEED ANALYSIS

Crude Protein (Min).....16.00 %
THIS INCLUDES NOT MORE THAN 1.50% EQUIVALENT
CRUDE PROTEIN FROM NON-PROTEIN NITROGEN
Crude Fat (Min).....2.00 %
Crude Fiber (Max).....16.00 %
Acid Detergent Fiber (ADF) (Max).....22.00 %
Calcium (Ca) (Min).....0.75 %
Calcium (Ca) (Max).....1.25 %
Phosphorus (P) (Min).....0.50 %
Salt (NaCl) (Min).....0.50 %
Salt (NaCl) (Max).....1.00 %
Copper (Cu) (Min).....22.00 ppm
Copper (Cu) (Max).....27.00 ppm
Selenium (Se) (Min).....0.30 ppm
Vitamin A (Min).....5000 IU/LB

INGREDIENTS

Processed Grain By-Products, Roughage Products, Grain Products, Plant
Protein Products, Molasses Products, Forage Products, Calcium
Carbonate, Salt, Ammonium Chloride, Vitamin E Supplement, Colored
with Iron Oxide, Vitamin A Supplement, Cobalt Carbonate, Manganese
Sulfate, Ethylenediamine Dihydrochloride, Zinc Sulfate, Vitamin D3
Supplement, Basic Copper Chloride, Sodium Selenite.

554F-M5L-G 4

DIRECTIONS

Feed at a rate of 1.67 lbs to goats/kg weighing 50 lbs to provide
22.7 mg decoquinate per 100 lb of bodyweight (0.5 mg/kg) per day.
Feed at least 28 days during period of exposure to
See Reverse Side For Directions for Use and Precautionary
Statements



MANUFACTURED BY
Purina Animal Nutrition LLC
Arden Hills, MN 55126

Feed Questions? Please Call 1-800-227-8941
Net Weight 50 lb (22.67 kg)



54209

6016GT

KALMBACH

GAME PLAN ALL NATURAL*
MILK & MEAT PELLET W/

OPTIFERM

*WITH ADDED VITAMINS, MINERALS, AND AMMONIUM CHLORIDE

A complete feed formulated for lactating and growing goats

GUARANTEED ANALYSIS

Crude Protein (Min.)	16.00%	Salt (NaCl) (Min.)	0.75%
(Contains not more than 0.9% equivalent crude protein from non-protein nitrogen)		Salt (NaCl) (Max.)	1.25%
Crude Fat (Min.)	4.00%	Selenium (Se) (Min.)	0.6 ppm
Crude Fiber (Max.)	10.00%	Copper (Cu) (Min.)	30 ppm
Calcium (Ca) (Min.)	1.00%	Copper (Cu) (Max.)	50 ppm
Calcium (Ca) (Max.)	1.50%	Vitamin A (Min.)	18,000 IU/lb.
Phosphorus (P) (Min.)	0.50%	Vitamin D (Min.)	1,500 IU/lb.
		Vitamin E (Min.)	55 IU/lb.

INGREDIENTS

Ground Corn, Soybean Meal, Wheat Middlings, Canola Meal, Corn Distillers Dried Grains with Solubles, Cane Molasses, Wheat Flour, Salt, Monocalcium Phosphate, Dicalcium Phosphate, Calcium Carbonate, Ammonium Chloride, Active Dry Yeast, Yeast Extract, Soybean Oil, Potassium Sulfate, Magnesium Sulfate, Magnesium Oxide, Vitamin A Supplement, Vitamin E Supplement, Vitamin D-3 Supplement, Zinc Sulfate, Ferrous Sulfate, Manganese Sulfate, Copper Sulfate, Ethylenediamine Dihydrochloride, Cobalt Sulfate, Zinc Proteinate, Manganese Proteinate, Copper Proteinate, Selenium Yeast, and Sodium Selenite.

FEEDING DIRECTIONS

Lactating Goats: Feed at the rate of 1 lb. for each 3 lb. of milk with good quality forage.

Growing Goats: Feed at the rate of 1 to 3% of body weight along with good quality forage depending on body condition and desired rate of gain.



Net Weight - 50 LBS. (22.7 Kg.) - BULK - Shown on Invoice

610201-293

MANUFACTURED BY:

KALMBACH FEEDS, INC.

UPPER SANDUSKY, OHIO 43351

PURINA®
GOAT CHOW™

SUPPLEMENT FEED FOR ALL CLASSES OF GOAT

GUARANTEED ANALYSIS

Crude Protein (Min).....	16.00 %
Crude Fat (Min).....	2.50 %
Crude Fiber (Max).....	9.00 %
Acid Detergent Fiber (ADF) (Max).....	11.00 %
Calcium (Ca) (Min).....	0.80 %
Calcium (Ca) (Max).....	1.30 %
Phosphorus (P) (Min).....	0.60 %
Salt (NaCl) (Min).....	0.75 %
Salt (NaCl) (Max).....	1.25 %
Copper (Cu) (Min).....	38.00 ppm
Copper (Cu) (Max).....	48.00 ppm
Selenium (Se) (Min).....	0.60 ppm
Selenium (Se) (Max).....	0.72 ppm
Vitamin A (Min).....	5000 IU/LB
Vitamin D3 (Min).....	1000 IU/LB
Vitamin E (Min).....	50 IU/LB

INGREDIENTS

Grain Products, Plant Protein Products, Processed Grain By-Products, Molasses Products, Calcium Carbonate, Salt, Forage Products, Soybean Oil, Lignin Sulfonate, Dicalcium Phosphate, Monocalcium Phosphate, Citric Acid, Propionic Acid (a Preservative), Sodium Selenite, Vitamin D3 Supplement, Vitamin E Supplement, Copper Sulfate, Zinc Oxide, Vitamin A Supplement, Cobalt Carbonate, Manganese Sulfate, Ethylenediamine Dihydrochloride, Zinc Sulfate, Basic Copper Chloride.

554A-SPK-A 3

DIRECTIONS

PURINA(R) GOAT CHOW(TM) may be fed to dry does and adult bucks at a rate of up to 1% of body weight per day.

After kidding, feed an additional 1 lb PURINA(R) GOAT CHOW(TM) for every 3 lbs of milk produced.

For young growing kids, feed measured amounts of PURINA(R) GOAT CHOW(TM) up to 1.5% of body weight per day.

Feed with good quality roughage to all goats after weaning.

IMPORTANT

1. If kids have not been creep fed, offer grass hay on a free choice basis upon arrival.

See Reverse Side For Precautionary Statements



MANUFACTURED BY
Purina Animal Nutrition LLC
Arden Hills, MN 55126

Feed Questions? Please Call 1-800-227-8941
Net Weight 50 lb (22.67 kg)

3004591-506

PURINA® GOAT CHOW™

554A

Novice/Junior

Blindly pick 5 labels to label parts goat skeleton 2 points each 10 points total

Blindly pick 5 labels to label parts of goat digestive system 2 points each 10 points total

Intermediate

Label 10 parts of goat skeleton (using labels) $\frac{1}{2}$ point each 5 points total

Label 10 parts of goat digestive system (using labels) $\frac{1}{2}$ point each 5 points total

Know the order of the goats four stomachs 2 points each 8 points total

1. Rumen 2. Rectulum 3. Omasum 4. Abomasum

What is rumination ? Burping up cud (food) and chewing on it before swallowing again 2 points

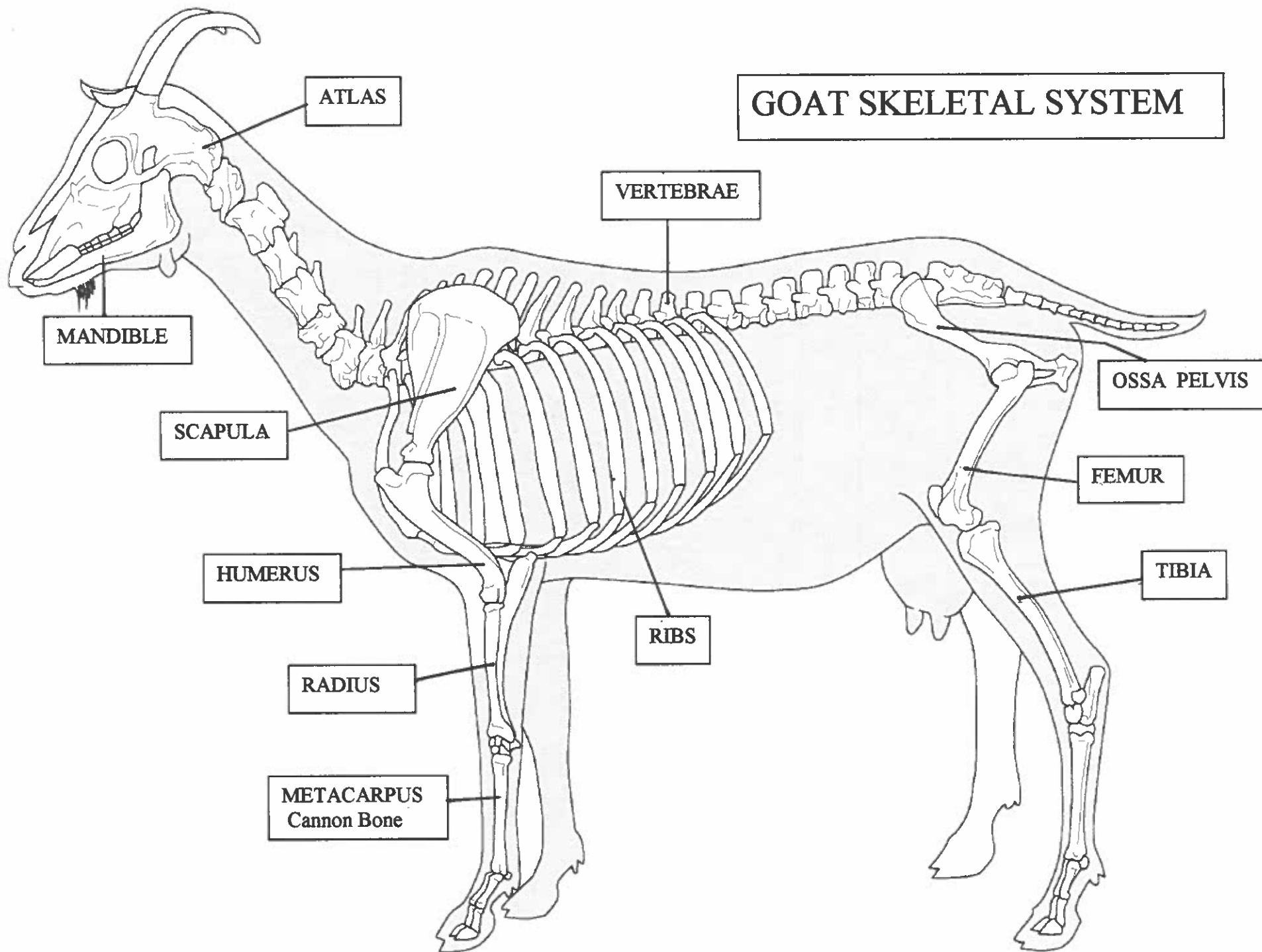
Senior

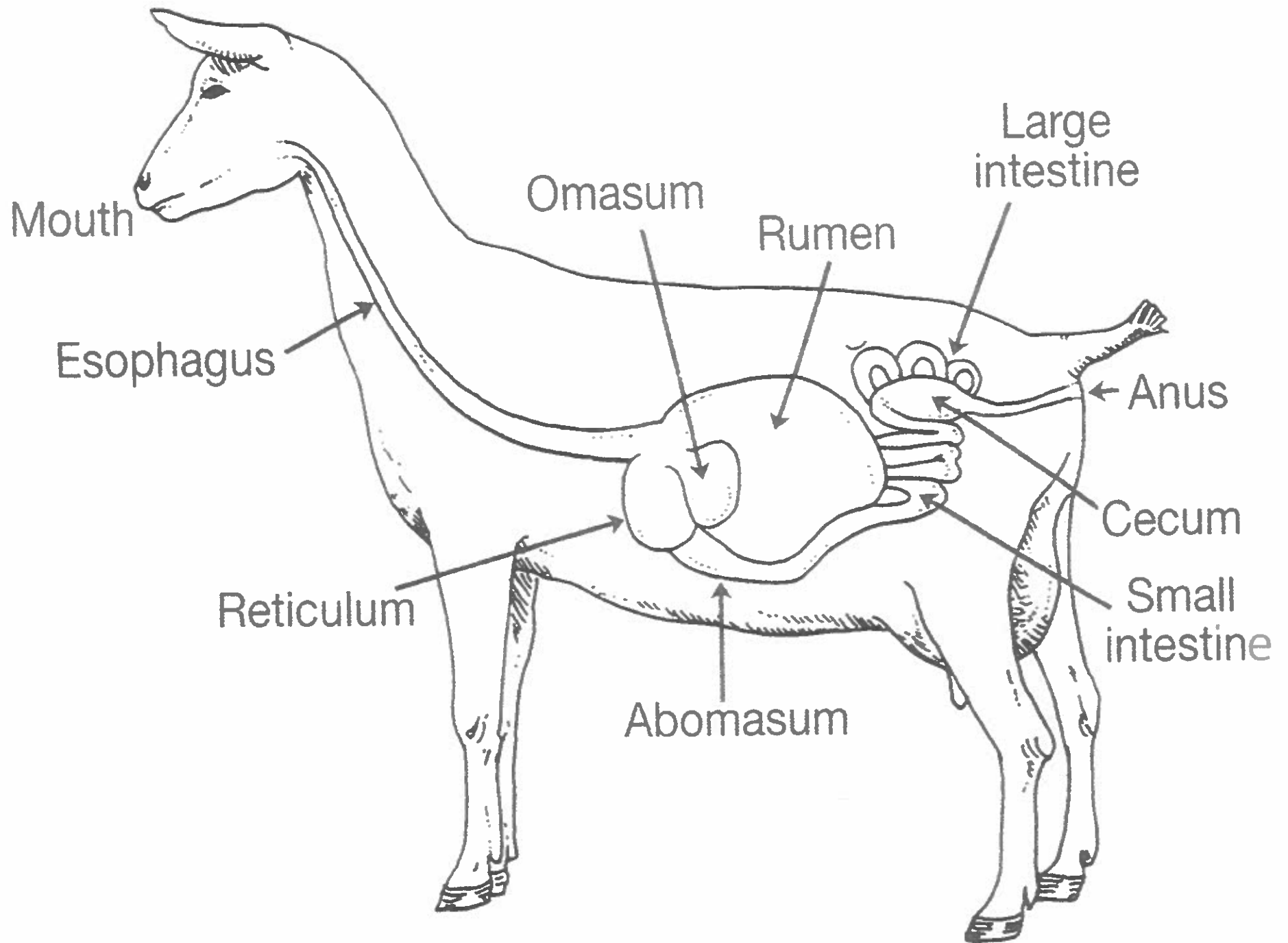
Point to and say 10 goat skeleton parts (using NO labels) $\frac{1}{2}$ point each, 5 points total

Explain the order and what happens in goat digestion process

Organ order 5 points digestion process in each 5 points 10 points total

1. **MOUTH** Goat eats food-Food is chewed moved to esophagus
2. **ESOPHAGUS** carries food to the first stomach the Rumen
3. **RUMEN** starts fermentation , goat burps up cud back to esophagus
4. **ESOPHAGUS** returns back to the mouth
5. **MOUTH** further chews food up goes back to esophagus
6. **ESOPHAGUS** takes food to the second stomach the Rectulum
7. **RECTULUM** contracts and breaks down food moves on to the third stomach Omasum
8. **OMASUM** squeezes water out of food moves on to the fourth stomach Abomasum
9. **ABOMASUM** "real stomach"uses stomach acids for digestion on to small intestine
- 10.**SMALL INTESTINE** further nutrient digestion on to Cecum
- 11.**CECUM** junction between small and large intestines food is digested by microorganisms on to large intestines
- 12.**LARGE INTESTINE** absorbs water prepares fecal pellets at end of intestine and out of the ANUS





Goat Project Book Review (10 points)

Topic of Interest & Summary- page 8 & 9 (2 points)

Treatment Record Activity – page 19 & 20 (2 points)

Drug Residue Testing - page 29 (2 points)

My Animal's Pen- page 32 (2 points)

Project Pictures- page 36 (2 points)

Bonus (4 points)

Bonus Questions' Topic Areas (2 points each for a total of 4 possible points):

- General 4-H Knowledge (Pledge, 4-H Colors)
- Tattooing, Gestation

Body Condition Scoring

Body condition score (BCS) ratings

BCS 1.0 = The goat is visually emaciated and weak. The backbone is highly visible and forms a continuous ridge. The flank is hollow and ribs are clearly visible. There is no fat cover and fingers can easily penetrate into the intercostal spaces.

BCS 2.0 = The goat's backbone is still visible with a continuous ridge. Some ribs can be seen and there is a small amount of fat cover. Ribs are still felt and intercostal spaces are smooth, but can still be penetrated.

BCS 3.0 = The backbone is not prominent, ribs are barely discernible and an even layer of fat covers the ribs. Intercostal spaces are felt using pressure.

BCS 4.0 = The backbone and ribs cannot be seen. The side of the animal is sleek in appearance.

BCS 5.0 = The backbone is buried in fat and the ribs are not visible. The rib cage is covered with excessive fat.

BCS 1



Spine



Sternum

BCS 3



Spine



Sternum

BCS 5



Spine



Sternum

Novice / JR – Will explain what body condition scoring is and why it is important 10pts
Will pick BCS 1 from 3 pictures **5pts**

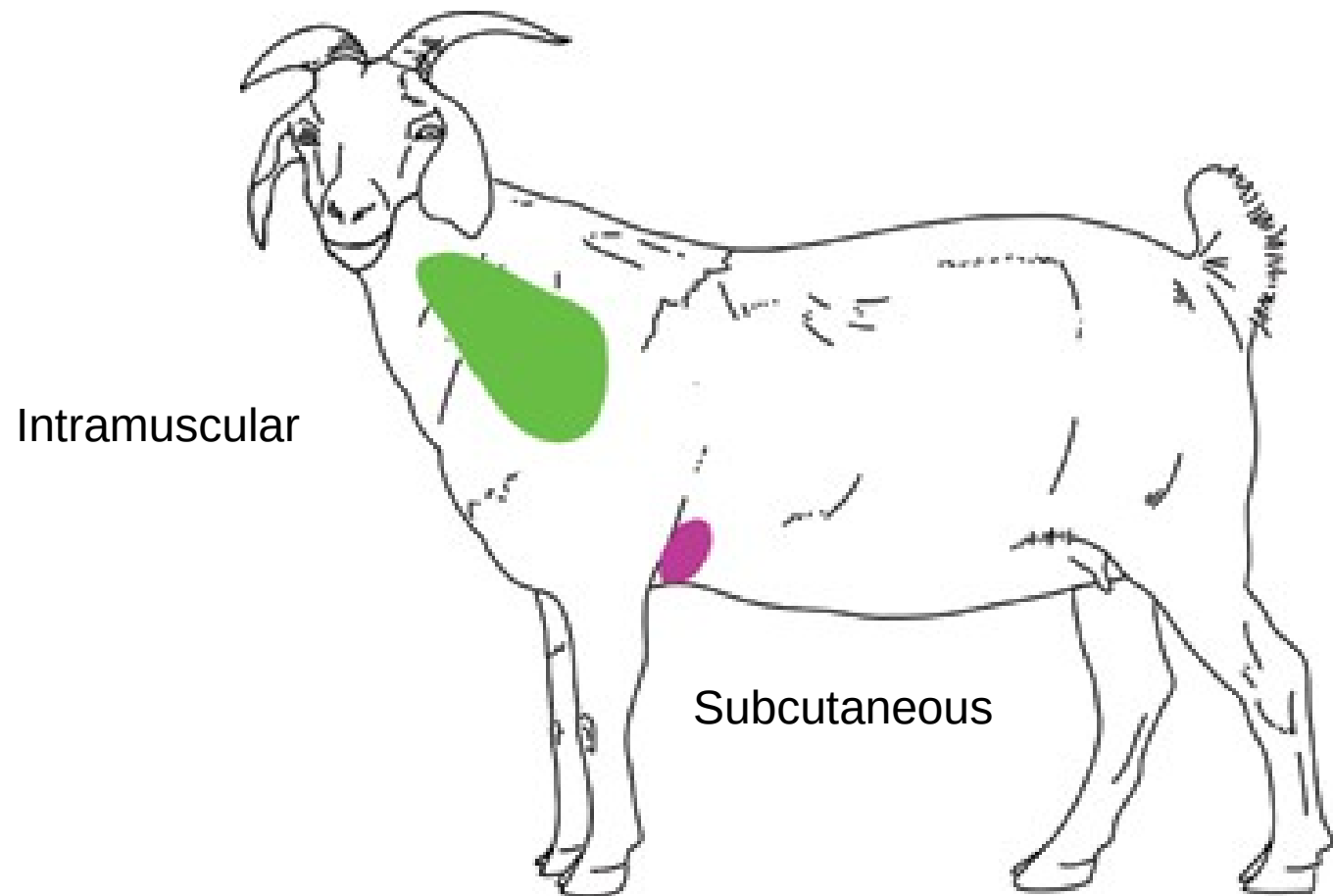
Intermediate – Will explain what is felt for at the backbone and rib cage 10pts
Will place 3 pictures in order BCS 1 3 5 **5pts**

Seniors – Will explain why BCS 1 & 5 are bad for a goats health 10pts
Will place 3 pictures in order BCS 1 3 5 **5pts**

Injections in Goats

Intramuscular – directly in the muscle at a 90 degree angle to body

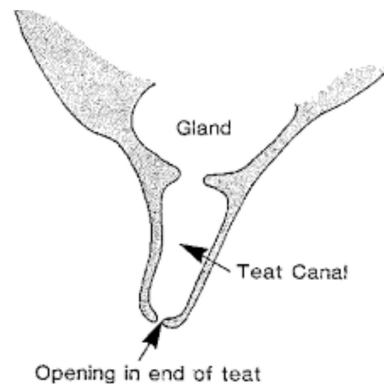
Subcutaneous – between the skin and muscle at a 45 degree angle to body



Intravenous – directly into the vein at a flat position with the body



Intramammary – directly into a teat through the orifice using a special needle called A cannula



>To prepare a single syringe:

Clean top of the bottle with an alcohol wipe.

Shake vial well.

With the cap on the needle, pull back the plunger to the dosage line, filling the syringe with air.

Remove the cap and insert the needle into the rubber top.

Push the air into the vial.

Keep the needle tip in the vial and turn upside down.

Pull back the plunger to the line on the syringe for your dose.

Keep the syringe tip in the medicine.

If there are bubbles in the syringe, tap with your finger to move air bubbles toward the needle. Push gently on the plunger to push the air bubbles back into the vial. Check your dosage line, and redraw if needed.

Remove the syringe from the vial and cap the needle until ready to inject.

Novice / Jrs – Will Name the 4 injection types and how they are administered (under skin , in muscle, in vein, in udder) **4 pts** Vocabulary Cannula – A Special needle use to inject medication into the udder. **1Pt** Will show on a Diagram where each injection can be given **10pts**

Intermediate – Will show on a diagram where each injection can be given **5pts**
Will go through intramuscular injection procedure using blunt needle in a Practice flesh 10pts

Seniors – Will show on a diagram where each injection can be given **5pts**
Will go through Subcutaneous injection procedure using a blunt needle in a Practice flesh 10pts

Common Goat Breeds and Descriptions



Alpine
Use – Dairy
Origin – France
Size - med-large
Face – straight
Ears – erect
Color - any



Lamancha
Use – Dairy
Origin – USA
Size - med-large
Face – straight
Ears – elf or gopher
Color - any



Nigerian Dwarf
Use – Dairy
Origin – W Africa
Size - small
Face – straight
Ears – erect
Color - any



Nubian
Use – Dairy
Origin – England
Size - large
Face – Roman
Ears – pendulous
Color - any



Oberhasli
Use – Dairy
Origin – Switzerland
Size - med
Face – straight
Ears – erect
Color – chamoisee/black does



Saanen
Use – Dairy
Origin – Switzerland
Size - large
Face – straight
Ears – erect
Color – white/cream



Toggenburg
Use – Dairy
Origin – Switzerland
Size - med
Face – straight
Ears – erect
Color – fawn/chocolate



Pygmy
Use – pet
Origin – W Africa
Size - small
Face – straight
Ears – erect
Color – any



Angora
Use – Fiber
Origin – Turkey
Size - med
Face – straight
Ears – Airplane
Color – white



Kinder
Use – Dairy/meat
Origin – USA
Size - med
Face – straight/roman
Ears – erect/pendulous
Color – any



Boer
Use – Meat
Origin – Africa
Size - Large
Face – Roman
Ears – Pendulous
Color – any



Kiko
Use – Meat
Origin – New Zealand
Size - Large
Face – straight
Ears – Airplane
Color – Any

provided by Dr. An Peischel



Savannah

Use – Meat

Origin – Africa

Size - Large

Face – Roman

Ears – Pendulous

Color – White

Novice / Jrs – Will Label 10 goat breed pictures of choice **15pts**

Intermediate – Will match 10 descriptions with breed pictures of choice **15pts**

Seniors – Will name 10 goat breeds by looking at descriptions only of choice **15 pts**