

**2018 NYS Regional 4-H  
Junior Dairy Bowl Contest**

**Junior Packet 1, Phase A**

1) What is the term commonly used to refer to one-hundred pounds of milk?

Hundredweight (or cwt)

2) How many upper teeth does a cow have in the front of her mouth?

None

3) The udder is supported mainly by what structure?

Median suspensory ligament

4) What is the sugar in milk called?

Lactose

## Novice Packet 1, Phase B

1) Name four types of bedding typically used for dairy cattle.

Straw

Sand

Recycled manure solids

Newspaper

Sawdust

Shavings

Almond hulls

Rubber mats

Old hay

2) Name 3 important points to consider when selecting a calf as a project animal

Age/birth date

Breed

Health status

Pedigree

Conformation

Cost

Place to house it

3) Name the two main gases found in the cow's rumen

Carbon dioxide

Methane

4) Name two methods for reducing heat stress in dairy cows

Shade

Ventilation

Cooling

Sprinklers

Fans

Free choice water

### **Junior Packet 1, Phase C**

- 1) What do the initials TMR stand for?  
Total Mixed Ration
- 2) What is the process that kills bacteria in milk?  
Pasteurization
- 3) Which parent determines the gender of the calf?  
The sire, father, bull
- 4) One serving of milk is equal to how many ounces?  
8 ounces
- 5) What is the more common name used for Keratoconjunctivitis?  
Pinkeye
- 6) What is the most popular type of cheese used to make pizza?  
Mozzarella
- 7) What is the most important nutrient for dairy cattle?  
Water
- 8) What is the process that changes cream into butter?  
Churning
- 9) What is dystocia?  
Difficult calving
- 10) How many servings of dairy products are recommended each day?  
3 servings
- 11) What is the term that describes an animal that does not grow horns due to its genetic make-up?  
Polled
- 12) If a calf is born breach, which direction did the calf present?  
Backwards
- 13) Which hormone is known as the milk letdown hormone?  
Oxytocin

14) In which stomach compartment does hardware disease occur?

Reticulum

15) How many pounds of whole milk does it take to make one pound of cheese?

10 pounds

16) What is a castrated bull called?

Steer

## Junior Packet 1, Bonus Questions

1) Name 3 factors that influence the amount of water consumed by a dairy cow.

- Body size
- Environmental temperature
- Water temperature
- Water quality
- Relative humidity
- Diet
- Level of milk production

2) Name 3 functions of saliva.

- Moistens food
- Lubricates food
- Acts as a buffer
- Provides fluid base for nutrients
- Provides environment for microbial growth

3) Name 3 management practices that should be considered in regards to cow safety or comfort in the holding pen or area.

- Minimize the time spent in the holding area to less than an hour
- Safe footing (floor grooves)
- Proper use of crowd gate
- Ventilation/cooling of cows with fans, sprinklers
- Water availability before and after the holding area and parlor

4) Name 3 diseases in cattle with a color in their name.

- Red Water
- Red Nose
- Black leg
- Blue Tongue
- White Muscle Disease
- Pink eye
- White Heifer Disease

**2018 NYS Regional 4-H  
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**Junior Packet 2, Phase A**

1) What does the acronym VFA stand for?

Volatile Fatty Acid

2) How many gallons of water does a cow drink per day?

25 to 50 gallons

3) What term refers to the basic unit of inheritance for all living things?

Gene

4) How many hours per day do cows spend eating?

3- 5 hours

## Junior Packet 2, Phase B

1) What are the two main functions of the large intestine?

Water absorption

Storage of waste materials

2) Name two storage options for excess colostrum that is not immediately fed.

Add preservative acid

Freeze

Ferment

Refrigerate

3) What two ways can you test for Bovine Viral Diarrhea (BVD)?

Ear notch

Blood test

4) Name the two most important management practices that can reduce foot problems.

Hoof trimming

Foot baths

## Junior Packet 2, Phase C

1) What is the name of the sugar made from glucose and galactose that is found in milk?

Lactose

2) What part of the cow does laminitis effect?

Hooves or feet

3) Which acid is found at the highest level in good quality silage?

Lactic

4) How many compartments are found in the heart of a cow?

4 chambers

5) If a male is born twin to a female heifer calf, what is the heifer calf called?

Freemartin

6) An increase in somatic cell counts indicates which disease?

Mastitis

7) How often should a dairy farmer wash and sanitize the bulk tank?

Every time it is emptied

8) What is the term for an injection given under the skin?

Subcutaneous

9) Propylene glycol is used to treat which metabolic disorder?

Ketosis

10) What is the piece of equipment called that divides the solid manure components from the liquid?

Manure separator

11) What does the acronym NYSCHAP stand for?

New York State Cattle Health Assurance Program

12) What are the small, finger like projections of the wall of the rumen?

Papilla

13) Which vitamin is known as ascorbic acid?

Vitamin C

14) During which season of the year is demand for dairy products typically the lowest?

Summer

15) What is the largest cost of producing milk?

Feed cost

16) Who is the current United States Secretary of Agriculture?

Sonny Perdue

## Junior Packet 2, Bonus Questions

1) Name 3 internal parasites of dairy cows.

Lung worms

Round worms

Stomach worms

Liver flukes

Coccidian

2) Name 3 ways that a pathogen can enter a calf's body.

Mouth

Navel

Nose

3) Name the 3 primary Volatile Fatty Acids.

Acetic

Butyric

Propionic

4) What are 3 ways to help reduce soil erosion?

Wind breaks

Cover crops

Strip cropping

Contour cropping

Terracing

Grass waterways

Reduced tillage

Soil seeding

Planting hedge rows

**2018 NYS Regional 4-H  
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**Junior Packet 3, Phase A**

- 1) Define homogenization.

The process of evenly distributing the fat throughout the milk

- 2) What does the acronym VFD stand for?

Veterinary Feed Directive

- 3) What is the desired angle of a dairy cows hoof?

45 degrees

- 4) What is another name for the building blocks of proteins?

Amino acids

### **Junior Packet 3, Phase B**

1) Name 4 things that a dairy judge is looking for when judging a showmanship contest.

Animal condition

Cleanliness

Clipping

Grooming

Appearance of exhibitor

Leading the animal

Posing the animal correctly

Showing the animal to the best of its advantage

Alertness and poise of exhibitor

Correct show halter

2) Name the four stages of the estrus cycle.

Estrus

Metestrus

Diestrus

Proestrus

3) If a cow were to need more calcium, what are 3 ways you could provide it to her?

IV

Oral bolus

Drenches

Subcutaneously

4) Name 3 advantages of feeding a total mixed ration.

Eliminate sorting

Consistency

High dry matter intake

Free-choice mineral is not necessary

Potentially for higher milk production

Lower percent fiber needed in ration

Easier to balance precisely

Fewer digestive upsets

Can feed a variety of by-products

**2018 NYS District 4-H  
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**Junior Packet 3, Phase C**

1) What do the 4 H's in 4-H stand for?

Head, Heart, Hands, Health

2) Name the part of the cow located just forward of the chine.

Withers

3) Once you begin chopping forages, what should be used to measure particle length?

Particle separator or shaker box

4) What flavor in milk is characterized by a sharp, astringent taste that lingers as an unpleasant aftertaste?

Rancid

5) When feeding dairy animals, what do we call the material that remains after all water is removed?

Dry matter

6) What is the name of the muscle cells that constrict to force milk out of the alveoli?

Myoepithelial cells

7) What is the term for a pH of less than 7?

Acidic

8) The first streams of milk stripped from the udder prior to milking are called what?

Foremilk

9) What does the acronym FARM stand for?

Farmers Assuring Responsible Management

10) The cyclic opening and closing of a teat cup liner is known as what?

Pulsation

11) During artificial insemination, where should semen be deposited?

Uterine body

12) The tiny, fingerlike projections called papillae line what?

The rumen

13) On a dairy farm, where would copper sulfate most commonly be used?

In a foot bath

14) What does the acronym CAFO stand for?

Concentrated Animal Feeding Operation

15) Which term describes extra teats on a dairy heifer or cow?

Supernumerary

16) How many daughters must a bull have had in order for his proof to be evaluated?

10 daughters

**2018 NYS District 4-H  
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**Junior Packet 3, Bonus Questions**

1) Name 3 parts of a milking machine.

Pulsator

Claw

Vacuum pump

Air tubes/hoses

Milk tubes/hoses

Inflations

2) Name 3 of the 4 critical factors of colostrum management?

Quality

Quantity

Timing

Cleanliness

3) Name 3 examples of Class 1 dairy products.

Chocolate milk

Whole milk

Reduced fat milk

Low fat milk

Fat free milk

4) Name 3 types or methods of storage facilities for silage.

Bunker silo

Trench silo

Upright or tower silo

Oxygen limiting silo

Plastic bag

**NYS Regional 4-H  
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**Junior Packet 4, Phase A**

- 1) True or False: Immature hay is more valuable as a feed for dairy cows than mature hay.

True

- 2) What is the recommended body condition score for a dry cow?

3.5

- 3) True or False: The somatic cell count for an animal or for a herd is a good indicator of mastitis prevalence.

True

- 4) Does the number of services per conception typically rise or lower during summer months?

Rise

## Junior Packet 4, Phase B

1) Name 4 signs of estrus in dairy cattle.

Restlessness

Bellowing

Following/smelling other cows

Mounting

Standing to be mounted

Clear mucus discharge

Red/swollen vulva

2) Name 4 dairy breeds and where they originated from.

Ayrshire: Scotland

Brown Swiss: Switzerland

Guernsey: Isle of Guernsey

Jersey: Isle of Jersey

Milking Shorthorn: England

Holstein: The Netherlands

3) Name 3 different areas on the farm that contribute waste to the nutrient management program.

Feeding area

Housing or loafing area

Holding pen

Return alley

Foot baths

Milking parlor

4) What are 3 classic symptoms of hypocalcemia?

Staggering

Cold ears

Lying in tucked head position

S-shape of neck when lying down

Unable to stand

Body temperature below 100\* F

**2018 NYS Regional 4-H  
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**Junior Packet 4, Phase C**

- 1) How much time is required after milking for the teat end to close entirely?  
1 hour
- 2) What calcium deficiency most often affects the elderly?  
Osteoporosis
- 3) What dairy product is Kefir most closely resembled to?  
Yogurt
- 4) Microminerals are typically measured in what unit?  
Parts per million or PPM
- 5) What is the loose skin of the underside of the neck?  
Dewlap
- 6) In which year was Hoard's Dairyman founded?  
1885
- 7) What mineral is required to establish legumes in the soil?  
Phosphorus
- 8) In reference to milk, what do the initials FCM stand for?  
Fat corrected milk
- 9) What is the most common cause for downer cows?  
Milk Fever
- 10) Name the skin disease that is caused by the Bovine Papilloma virus.  
Warts
- 11) In which part of the small intestine do secretions from the pancreas, liver, and intestine enter?  
Duodenum
- 12) Gross energy is defined as what.  
The total energy content of feed
- 13) What substance can cause toxic levels in the lower section of the corn stalk after prolonged period of drought?  
Nitrate

14) What month is national Ice Cream Month?

July

15) How old is a calf when it begins to chew its cud?

2-3 weeks old

16) What is the name for an ovarian follicle that grows and surpasses ovulatory size, but fails to ovulate?

Cystic ovary

## Junior Packet 4, Bonus Questions

1) What 3 management practices should a farmer follow when a cow has mastitis?

Culture milk to determine type of infection

Treat with antibiotics

Separate treated cow from milking herd

Dump milk/milk last

Dry off the infected quarter

Quarter milk the cow

Cull the infected cow

Identification of treated animal

2) When hoof trimming, what 3 pieces of information should the trimmer record about each cow?

Cow's name or ID number

Date Lesion and treatment applied

Location of lesion and severity of lesion

Follow up treatment required

Foot that is treated or abnormal

3) Name 3 of the 5 major components of milk

Protein (casein), Fat, Water, Lactose, Vitamins and Minerals

4) Name 3 signs of illness in calves

Decreased appetite

Coughing

Heavy breathing

Nasal discharge

Watery manure

Droopy ears

Elevated temperature

Sunken eyes

**2018 NYS Regional 4-H  
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**Junior Packet 5, Phase A**

- 1) Semen for artificial insemination should be thawed in clean water heated to what temperature?

95 degrees Fahrenheit

- 2) What is the first phase of fermentation, which takes place in packed silage while oxygen is still present?

Aerobic phase

- 3) On average, cows have a flight zone of how many feet?

5 feet

- 4) What are the small fingerlike projections which cover the surface of the small intestines?

Villi

**2018 NYS Regional 4-H  
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**Junior Packet 5, Phase B**

- 1) Give 4 examples of a farm's assets.

Cows

Land

Equipment

Feed

Facilities

Co-op equity

Milk check receivables

- 2) Name an example of a product in each of the 4 major classes of dairy products.

Class 1: Fluid milk

Class 2: Cream, yogurt, ice cream, cottage cheese, sour cream, soft cheeses

Class 3: Cream cheese and hard manufactured cheeses

Class 4: Butter and dried milk

- 3) Name 3 diseases calf hood vaccinations should be considered for.

Blackleg

Brucellosis

BVD

Clostridia

IBR

Leptospirosis

Malignant edema

Scours

- 4) Name 3 of the 5 top considerations of superior calf housing.

Ventilation

Isolation vs. group housing

Labor efficiency

Cost

**2018 NYS District 4-H  
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**Junior Packet 5, Phase C**

- 1) A letter in a bull's stud code number tells you what about him?  
His breed
- 2) What month is National Grilled Cheese month?  
April
- 3) What do no till cropping programs help to reduce?  
Soil erosion
- 4) Who is the New York State Commissioner of Agriculture and Markets?  
Richard Ball
- 5) During hot weather, a cow's body temperature often peaks at what time of day?  
Midnight
- 6) What is the official state snack of New York?  
Yogurt
- 7) Naturally ventilated bars need to be positioned in which direction?  
East-West
- 8) What is the name of the official written documentation of a veterinarian's interaction with a dairy farm?  
Veterinary Client Patient Relationship
- 9) What is the name of the fetal component of the placental attachment?  
Cotyledon
- 10) A cow can smell up to how many miles away?  
6 miles
- 11) When training employees, you want to review several SOP's. What do the initials SOP stand for?  
Standard Operating Procedures
- 12) How many years does it take to officially transform conventionally farmed cropland into organically farmed cropland?  
3 years
- 13) What did Dr. Harvey Thatcher invent?  
The milk bottle

14) What is the simple definition of a liability?

Something that you owe

15) How many calories are in one serving of whole milk?

160 calories

16) What percent of corn that is processed for human food ends up as by-product feeds?

50 percent

## Junior Packet 5, Bonus Questions

1) What are 3 considerations for achieving adequate, effective cleaning of milking systems?

Time

Temperature

Concentration of cleaning solution

Covers entire system

2) Name 3 major causes of calf scours.

Inadequate colostrum

Poor quality colostrum

Poor quality milk replacer

Unsanitary calving conditions

Overfeeding

Overcrowding

Inadequate ventilation

3) Name 3 of the 4 major factors that affect a dairy herd's pregnancy rate when using artificial insemination.

Heat detection rates

Herd fertility rates

Semen fertility

Inseminator proficiency

4) Name 3 common off-flavors in milk.

Bitter

Fruity

Rancid

Fermented

High acid

Oxidized

Sour

Lacks freshness

**2018 NYS Regional 4-H  
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**Junior Packet 6, Phase A**

- 1) What reproduction term is used to describe the proportion of breeding-eligible cows in the herd that become pregnant every 21 days?

Pregnancy rate

- 2) During the cooler months, how many inches of silage should be removed from the bunker face per day?

6-12 inches

- 3) What by-product of cheese making is known to be a muscle builder and can curb a person's appetite?

Whey

- 4) What is the term for squeezing two to three streams of milk by hand from the teat before putting on the milking machine?

Forestripping

## Junior Packet 6, Phase B

- 1) Name 3 benefits to using renewable energy on a dairy farm.

Decrease in farms carbon footprint

Lowering farm expenses

Recycle farm waste output

Tax credit

- 2) In business planning, a SWOT analysis allows a farm two assess their current situation and plan for the future. What does SWOT stand for?

Strengths, Weaknesses, Opportunities, Threats

- 3) Name the two biggest threats to a silage pile, which can be avoided by covering it quickly.

Oxygen

Water

- 4) Name the 3 main udder supports.

Median suspensory ligament

Lateral suspensory Ligament

Skin

### Junior Packet 6, Phase C

- 1) How many glasses of milk does the average cow produce per day?  
90 glasses
- 2) When an animal has grass tetany, she is deficient in what mineral?  
Magnesium
- 3) Which part of a plant is responsible for the uptake of nutrients?  
Roots
- 4) A bag of 15-10-20 fertilizer contains what percent nitrogen?  
15 percent
- 5) What term describes the time from the start to the end of a milking?  
Milking unit-on time
- 6) Which publication produced by the American Dairy Science Association (ADSA) turned 100 years old in 2017?  
Journal of Dairy Science
- 7) What is the ultimate factor affecting forage quality?  
Maturity
- 8) Immunoglobulins, or antibodies, cannot pass through what organ to reach the unborn calf?  
Placenta
- 9) Whole plant corn silage is typically harvested by cutting the stalk right above what part of the plant?  
The first node
- 10) The U.S. Olympic Committee announced a long term partnership through the year 2020 with what yogurt maker?  
Chobani
- 11) What does the acronym TQM stand for?  
Total Quality Management
- 12) According to the PDCA dairy cow unified score card, how many points are allotted for dairy strength?  
25 points
- 13) What term refers to the productive lifespan of a cow?  
Longevity

14) If you have to house mature and first-lactation cows together, you should never go over what percent stocking rate?

100% stocking rate

15) What piece of farm equipment is used to narrow the swath for a baler and to move the wetter material at the bottom of the windrow through the outside?

Rake or merger

16) What mammary gland development term describes the growth occurring at the same rate as the body?

Isometric

## Junior Packet 6, Bonus Questions

1) Name 3 legumes used for grazing or hay.

Alfalfa  
Clover  
Lespedeza  
Vetch  
Soybeans  
Peanuts  
Pes  
Birds-foot trefoil

2) Name 3 common areas of the farm on which you could implement standard operating procedures.

Parlor  
Calving/Maternity Area  
Fresh Cow Monitoring  
Parlor  
Feeding

3) Name 4 tests a milk processor will perform on a milk sample taken from the bulk tank on the farm to determine quality and standards.

Standard plate count (SPC)  
Coliform count (CC)  
Somatic cell count (SCC)  
Preliminary incubation (PI)  
Lab pasteurization count (LPC)  
Cryoscope (test of water in the milk)  
Delvo  
Babcock (butterfat test)

4) Name 3 nutrients found in corn fertilizer.

Nitrogen  
Phosphorus  
Potassium  
Boron  
Sulfur

**2018 NYS Regional 4-H  
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**Junior Packet 7, Phase A**

- 1) In regards to dairy cattle, what do the initials HBS stand for?  
Hemorrhagic Bowel Syndrome
- 2) What is commonly known as milkfat and is a staple in the production of a variety of dairy products, including cheese, butter, and ice cream?  
Butterfat
- 3) Cows do not reach mature body weight until which lactation?  
Third lactation
- 4) What disorder or disease is a result from a cow ingesting something metal?  
Hardware

## Junior Packet 7, Phase B

1) Name 4 organ systems found in the cow's body.

Circulatory

Respiratory

Nervous

Digestive

Reproductive

Skeletal

Muscular

Endocrine

Integumentary

2) What are the four classes of cheese?

Soft, Semi-soft, Hard, Very hard

3) Explain the difference between permanent and non-permanent identification for cows and provide one example of each.

Permanent: Remains the same over time, does not change

Ex: Tattoos, sketches, photographs

Non-permanent: can be changed over time

Ex: Ear tags, neck chains, ankle bands

4) Name 4 external parts of a dairy cow's head.

Poll

Eyes

Muzzle

Ears

Jaw

Forehead

Nostril

### **Junior Packet 7, Phase C**

- 1) What is the more common name for mycobacterium paratuberculosis?  
Johnes Disease
- 2) What is the term for using a drug in a way that is not specifically shown on the label?  
Extra label
- 3) What term describes forages harvested in the field and fed directly to livestock?  
Green chop
- 4) What animal feeding system uses grass paddocks, reels, electric fences, water, and rest periods for the paddocks?  
Rotational grazing
- 5) Where is follicle stimulating hormone (FSH) produced?  
Pituitary gland
- 6) Who was recently crowned as the 2018-2019 New York State Dairy Princess?  
Hailey Pipher
- 7) Why is it a good idea to clean water troughs, especially in the summer?  
To stop the growth of algae or bacteria
- 8) Which nutrient does Canola meal serve as a supplement for?  
Protein
- 9) How many pounds of grain should a calf consume for three consecutive days before she is weaned?  
1.5 to 2 pounds
- 10) At or below what air temperature is a newborn calf considered to be cold stressed?  
50 to 60 degrees
- 11) A disease that is transmitted between vertebrate animals and humans is known as what type of disease?  
Zoonotic
- 12) Which type of mastitis is easier to cure: Staph Aureus or Strep agalactiae?  
Strep agalactiae
- 13) How many pounds of whole milk does it take to make a gallon of ice cream?  
12 pounds

14) What is the name for the cluster of milk secreting cells in the udder of a dairy cow?

Alveoli

15) Fat has how many times more energy than carbohydrates?

2.25

16) How many pounds per cubic feet should forage be packed in a bunker silo?

50 pounds per cubic feet

## Junior Packet 7, Bonus Questions

- 1) The average gestation length of dairy cows varies from 276 to 292 days. Name 3 factors that can contribute to this variation.

- Age of the cow
- Breed of the cow
- Sex of the calf
- Number of calves carried
- Season of the year
- Health of the cow/health of the calf

- 2) Around the time of parturition, there are signals an animal will give to let people know they are about to calve. What are 3 of these signs?

- Udder full
- Vulva enlarged
- Mucus discharge
- Relaxation of ligaments at tail head
- Restlessness
- Leaking milk

- 3) Name 3 management practices of a herd with a good mastitis control program.

- Teat dip after milking
- Treat clinical mastitis cases
- Dry treat every cow at dry off
- Cull chronic cows
- Test cows with high SCC or clinical mastitis
- Milk infectious mastitis animals last

- 4) List 3 reasons why a cow may be lame.

- Abscess
- Foot rot
- Infection
- Injury

**2018 NYS Regional 4-H  
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**Junior Packet 8, Phase A**

1) How many phases are there in the ensiling process?

4

2) When comparing fertility in groups of dairy cows and heifers, which group is usually most fertile?

Heifers

3) Which breed of cow remains in negative energy balance for longer, a Holstein or a jersey?

Holstein

4) What is the name of the blister-like structure on the ovary that contains the egg before ovulation?

Follicle

## Junior Packet 8, Phase B

- 1) Name 3 reasons for modifying free stall barns to prevent birds from roosting in them.

- Keep birds from eating feed
- Keep cows cleaner
- Prevent spread of diseases
- Prevent damage to barn wiring or insulation

- 2) Name 2 ways teat dip can be applied.

- Spray
- Foamer
- Teat Cup

- 3) Name 3 major feedstuffs used in dairy cattle rations that can currently be genetically modified.

- Corn
- Soybeans
- Cotton
- Canola
- Alfalfa

- 4) OSHA Inspectors began inspecting dairies in 2014. Name 3 areas on the “dairy dozen” list that inspectors look at.

- Manure storage and collection facilities
- Bull/cow handling facilities
- Electrical systems
- Skid steer operations
- Tractor operations
- PTO guards
- Power transmission/functional component guards
- Posted hazard warnings
- Confined spaces
- Bunker silos
- Noise
- Hazardous energy control during equipment maintenance

### Junior Packet 8, Phase C

- 1) How long does it normally take for feed to pass through the digestive tract of a ruminant?  
4 days
- 2) What is the term used to refer to the height of a calf or cow at the withers and hips?  
Stature
- 3) Which system of the animal is affected by shipping fever?  
Respiratory
- 4) How many knees does a cow have?  
Two
- 5) What is the danger to a person when entering an upright silo too soon after filling?  
Toxic silo gases
- 6) What vitamin in milk helps maintain normal vision and skin?  
Vitamin A
- 7) Cows excrete how many pounds of manure for every pound of milk they produce?  
2 pounds
- 8) The protein percentage of first milking colostrum is approximately how many times more than that found in whole milk?  
5 times
- 9) What is the name of the plant component within the neutral detergent fiber fraction which is indigestible?  
Lignin
- 10) What would a dairyman most likely feed the cows to help correct or prevent the buildup of acid in the cow's stomach?  
Buffer or sodium bicarbonate
- 11) What is the unit of measurement used when injecting vaccine in dairy cattle?  
CC or Milliliter
- 12) What makes up the hindgut of the digestive system besides the cecum and rectum?  
Colon

13) What does morbidity refer to?

Number of sick animals in a specific amount of time

14) What hormone is found in a CIDR vaginal insert?

Progesterone

15) What term is used to define when a calf dies within 24 hours or is born dead?

Stillbirth

16) What energy source do bacteria use to produce acid for silage fermentation?

Sugar (Carbohydrates)

## Junior Packet 8, Bonus Questions

1) Name 3 fat soluble vitamins.

A, D, E and K

2) Name 3 of the 4 necessary economic inputs for a dairy farm.

Land

Labor

Capital

Management

3) Name 3 of the female reproductive hormones in regards to dairy cows.

Gonadotropin releasing hormone (GnRH)

Follicle stimulating hormone (FSH)

Estrogen

Luteinizing hormone (LH)

Progesterone

Prostaglandin

4) Name 3 of the 5 major categories of evaluation on the Dairy Cow Unified Score Card.

Frame

Dairy Character

Body Capacity

Udder

Feet and Legs (PDCA)

