Boone County 4-H Dairy Project 2025 Worksheet (5 pages) Grades 6-8

Name:
Dairy Reproduction and Genetics – Chapter 4, Dairy Resource Handbook
Name the hormone that is necessary for maintaining pregnancy
What gland produces luteinizing hormone?
Gestation (Pregnancy) for a dairy cow is approximately how many days?
What hormone causes milk let-down and aids in the birthing process?
How old does a heifer need to be before she is bred for the first time?
does not occur until approximately 18 hours after the beginning of standing heat.
Name two signs of Estrus:
1)
2)
What is the primary reason to use Artificial Insemination (AI)?
Why is Embryo Transfer used in the dairy industry?

Another	name for I	Dystocia is:	:						
Describe what "Heredity" means:									
Referring	g to page 3	7, please l	ist the nan	ne of the Paternal (	Grands	ire			
What do	es CTPI sta	and for?						_	
Give an e	example of	a low heri	itability ty <sub>l</sub>	pe trait:					
Name the three selective mating systems									
1)									
2)									
3)									
Research has shown that daughters of AI (artificial insemination) sires yield approximately pounds more milk per lactation than daughters of natural service bulls.									
Please complete the Punnett Squares. List % of red calves at the bottom of each example.									
		Si	re	1			S	ire	l
		В	b.				В	b.	
Dam	В				Dam	b.			
	В					b.			
				I					

## Manure Management & Environmental Quality - Chapter 9, Dairy Resource Handbook

What is a Watershed?
Using an on-line search, what is the name of the Watershed that you live in?
When liquid manure is to be used as fertilizer for crops, what type of land application is preferred – Surface or Injection?
List two benefits of choosing to "compost" dairy farm manure:
1)
2)
Animal Agriculture in the USA makes up% of total Greenhouse Gas (GHG) emissions.  Source: ghgguru.faculty.ucdavis.edu/category/blog/
True or False The most common concern regarding air quality on a dairy farm is the odor from manure. Proper storage and handling can help minimize the odor.
What does the following abbreviation stand for? CAFO
When building a manure storage facility, a dairy farmer plans for at least how many months of storage space?
True or False While federal environmental regulations must be followed by all, individual states may choose to impose stricter regulations.

## Caring for Animals – Chapter 13, Dairy Resource Handbook

Name four "Privileges" associated with caring for dairy animals.
1)
2)
3)
4)
True or False All milk produced by the cow during the withdrawal period must be discarded.
Name three types of "bedding" that farmers can use to keep cows clean and comfortable.
1)
2)
3)
Who is responsible for assuring that the milk and beef eaten by the consumer is a safe product?
A. The Retailer
B. The Processor
C. The Packer
D. The Farmer
E. All of the above
Describe the differences between a "Subcutaneous" injection and an "Intramuscular" injection.
Name two ways to identify a "treated cow" in order to prevent her milk from entering the food supply.
1)
2)
1

True or False On a "Medication In weight.	sert", recommended daily dosage is listed according to body
On page 160 in your Dairy Resources Hai	ndbook, is Omnibiotic labeled for treating Pneumonia in cattle?
On page 162 in your Dairy Resources Hai	ndbook, what is the minimum Phosphorus level in this feed?
What should you do if you notice someo	ne using "unethical techniques" to train their animal?
From the Pillars of Character model, list demonstrate those at the fair.	three of your favorite "pillars" and explain how you would
1)	
Explain:	
2)	
Explain:	
3)	
Explain:	