

Name: _____

Chapter 4 – Dairy Reproduction & Genetics Worksheet

Name three major organs of the female dairy cow's reproductive system and their function:

1)

2)

3)

Name the hormone that causes the release of LH and FSH _____

A dairy cow's estrus cycle typically occurs every _____ days.

Gestation (Pregnancy) for a dairy cow is approximately how many days? _____

What hormone stimulates muscular contractions of the uterus, which helps push the calf out of the birth canal? _____

How old does a heifer need to be before she is bred for the first time? _____

Name two signs of Estrus:

1)

2)

Name two heat detection aids:

1)

2)

List two reasons that a dairy farm would consider using artificial insemination (AI)?

1)

2)

Which estrus synchronization compound causes ovulation? _____

Standing heat normally lasts how many hours? _____

Why is Embryo Transfer used in the dairy industry?

Referring to page 32, what is the symptom of cystic ovarian disease? _____

What is another name for calving difficulty? _____

How many more pairs of chromosomes do cattle have as compared to humans? _____

Give an example of a high heritability type trait _____

Name the three selective mating systems:

1)

2)

3)

What is another word for heterosis? _____. Please give an example of how heterosis works:

List three linear type traits that are of economic importance and tend to lead to longer life in the dairy herd: 1) _____ 2) _____ 3) _____

Describe how you can help "mentor" the younger members in the dairy project:

List five important genetic traits evaluated on a dairy pedigree or in sire selection.

- 1)
- 2)
- 3)
- 4)
- 5)

Please complete the Punnett Squares. List the % of red calves at the bottom of each example.

		Sire	
		B	b
Dam	B		
	B		

		Sire	
		B	b
Dam	b		
	b		

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

What are the three steps a dairy farmer takes when spreading manure in order to retain the nutrients on his/her own ground and not allow the nutrients to escape into the air or water?

1. _____

2. _____

3. _____

List three types of waste requiring disposal on a dairy farm.

1. _____

2. _____

3. _____

What age heifer are you exhibiting at the fair this year? What is her estimated weight?

Based on your answer to question #4, how many pounds of water does your animal drink, and pounds of manure does she excrete, each day? (See Figure 9-1 on page 116.)

If silage leachate and manure are mixed, what potential hazard can occur?

When a farm is deciding what field to spread manure on, why do the Nitrogen (N) and Phosphorus (P) levels in the soil matter?

One's perception of animal agriculture is often formed through friends, family, and various media sources, along with one's background. Since you are a member of the dairy project, and therefore privileged to be exhibiting a dairy cow/heifer at the fair this summer, how can you use this experience to educate those around you about the value of animal agriculture?

Caring for Animals - Chapter 13, Dairy Resource Handbook

Name six "Privileges" associated with caring for dairy animals.

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____

Why is it important to dehorn animals when they are young?

Describe how a Veterinary-Client-Patient-Relationship is established

List the name and a brief description of each route of administering a medication

- SQ _____
- IM _____
- IV _____
- O _____
- MF _____

Give two examples of how milk from a treated cow cannot make it into the food supply

1)

2)

Refer to page 161 in your Dairy Resources Handbook for the following questions:

- 1) Does this feed contain a medicated ingredient?
- 2) What is the minimum level of protein in this feed?
- 3) Can this product be fed to Lactating Dairy Cows?

Refer to page 164 in your Dairy Resources Handbook for the following questions:

- 1) For an Intramuscular injection, should you give the injection in the rump or the neck?
- 2) If your heifer weighs 600 pounds, how many cc should be given each day?
- 3) Is it necessary to keep your heifer away from other animals when she has Pneumonia?

True or False _____ People for Ethical Treatment of Animals (PETA) has a goal of ending animal agriculture and turning everyone into vegetarians.

What would you say to a person who sees your dairy heifer at the fair and says she looks skinny as compared to the beef animals, and that you must not be feeding her properly?

When showing your animal, how can you be a “winner” without getting a blue ribbon?

Why is it valuable for people to see animals at the fair and know where their food comes from?

List three of your favorite Pillars of Character (Page 170) and explain how you would practice these at the Boone County 4H Fair.

1) _____

Explain:

2) _____

Explain:

3) _____

Explain: