Linda Jones (Sanchez)

Braden River High School

March 23-27, 2020

Veterinary Assisting 3: Reproductive Systems Unit

**Standard**s: 21.0: Explain the reproductive system and breeding of common companion and livestock animals.

21.03: Determine the appropriate age or weight for breeding.

21.05: Describe estrous cycle.

21.06 Describe breeding techniques (ex. Natural, artificial insemination, etc.)

21.07: Identify selection criteria of males and females for reproduction.

**Objectives:** Students will be able too..

* Explain the process of Artificial Insemination based on the reading from the article.
* Identify the advantages and disadvantages of artificial insemination.
* Describe the selection criteria including appropriate age for breeding.

**Assignment:** Artificial Insemination in Dairy Cattle Article and Questions.

Students will read the article and then complete the 20 questions according to the article.

[**https://ufdc.ufl.edu/IR00004730/00001**](https://ufdc.ufl.edu/IR00004730/00001)

**Artificial Insemination in Dairy Cattle** By: D.W. Webb

*University of Florida IFAS Extension*

Questions by C. Kohn, Waterford, WI

Directions: Read the article *Artificial Insemination in Dairy Cattle* by D.W. Webb, complete the questions below.

1. Define Artificial Insemination (AI):

2. Describe the origins of AI from 1322 AD:

3. What was Anthony von Leeuwenhook’s contribution to AI?

4. Who pioneered AI in 1899? What did he do?

5. Where was the first AI Cooperative established?

6. What is the main advantage of AI?

7. Name 6 other advantages of AI in your own words:

1.

2.

3.

4.

5.

6.

8. What are 4 disadvantages of AI?

1.

2.

3.

4.

9. How is semen collected for use in AI?

10. What does it mean to “extend” semen? Why would an AI company do this?

11. How many cows could be inseminated from one bull ejaculate?

12. What are the two most widely used semen extenders?

13. What is the lowest amount of sperm per insemination that can be used to ensure a good conception rate?

14. Why are antibiotics added to semen?

15. How does glycerol help improve the quality of semen?

16. Why is artificial coloring added to semen?

17. In early methods of AI, where was the semen deposited?

18. In the rectovaginal technique, where is semen deposited?

19. How long does estrus last?

20. When should cows be inseminated to obtain the maximum conception rate?