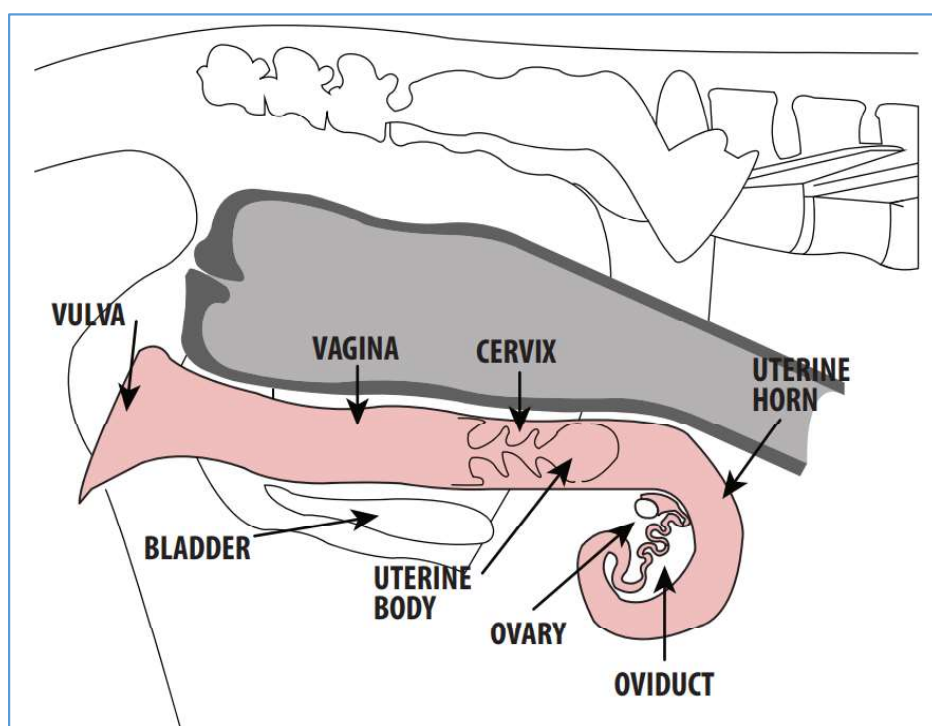


Name: _____ Class: _____

AI Technique Activity Sheet Answer Key

The purpose of this activity sheet is to understand and reference, when needed, proper Artificial Insemination technique.

1. Identify parts of the reproductive system in the blanks provided:



2. Insert notes from the presentation slides:

Locating the Reproductive Tract

- Place your gloved hand in the rectum of the cow with your hand in a cupped position
- Use sufficient lubrication so you do not hurt the animal
- Once inside the rectum, you will need to manipulate the reproductive tract to find the cervix

Removing Feces from Digestive Tract

- Upon inserting arm into rectum, you may need to remove feces from the tract to feel the cervix easier
- Cup your hand and scoop towards you, feces should fall out
- Do not completely remove your hand, as this will allow gas to enter the air causing it harder to palpate

Finding and Inserting the AI gun

- Find the cervix with your hand inserted in the rectum
- The cervix will be harder to the touch than the rest of the reproductive tract

AI gun through the Cervix

- Use the hand in the rectum to guide the AI gun through the reproductive tract
- Important to have the hand in the rectum do the work, the hand holding the AI gun should only apply slight pressure
- Locating the opening to the cervix may be the most difficult part of the process
- You may get trapped in the fornix vagina before you reach the cervix. To reduce this from happening, try to stretch the cervix forward to reduce the folds and create a more direct route to the cervix

Moving through the Cervix

- You will want to use your hand in the rectum to clamp down on the cervix and maneuver the AI gun into the opening of the cervix

Manipulating the Cervix

- Once inside the cervix move the AI gun tip from side to side and up and down to pass the AI gun through the rings of the cervix
- Don't force the AI gun through the cervix, only use gentle, steady pressure
- When the AI gun is in the cervix, you will no longer be able to feel it

Getting through the Cervix

- Use your hand in the rectum to feel for the tip of the AI gun
- The AI gun will appear at the end of the cervical rings once it has gotten through them all
- At this point you can pass the AI gun into either uterine horn

Depositing the Semen

- Deposit the semen just after the cervix into the small uterine body
- The body of the uterus is only $\frac{3}{4}$ to 2 inches long
- When depositing the semen, you will want to count slowly to 10
- You don't want to push the AI gun plunger too fast or risk shearing sperm cells that leave the straw

Semen Deposit

- Approximately 60% of semen deposited will be lost in this location no matter what
- Does not matter if you inseminate a horn, as the same amount of semen will be lost
- Important to hit this mark, as if you deposit in the cervix instead of uterus, more semen will be lost

Getting to the Oviduct

- Once in the uterine body, the semen will move from the reproductive tract to the oviduct
- Proper technique will help insure positive artificial insemination outcomes