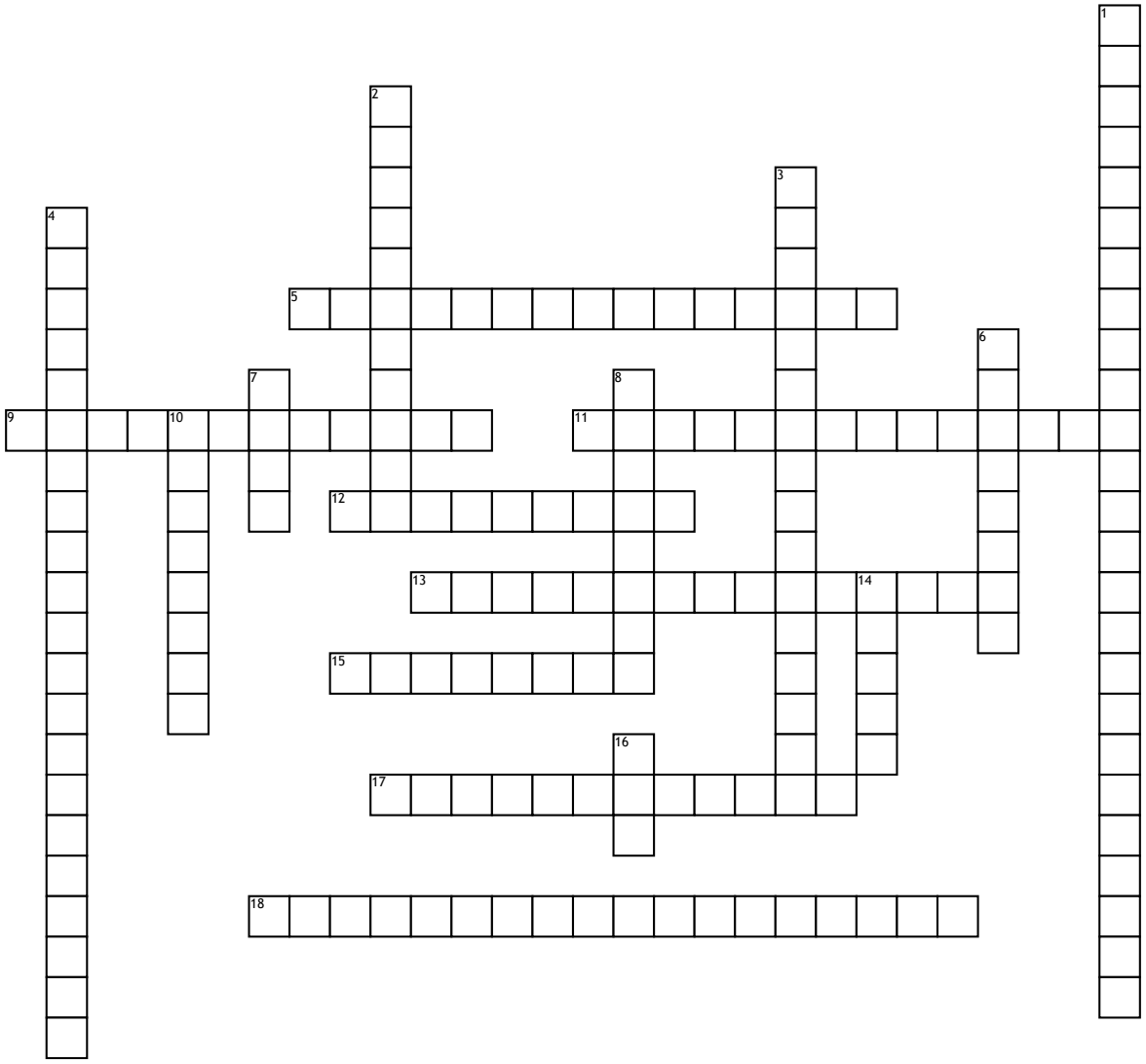
Name: _____ Date: _____

Post-Evaluation Semen Process



Across

5. A type of antibiotic that targets Gram Positive Bacteria

9. Preserves the sperm membrane during temperature shocks, most common form is egg yolk

11. Decreases ice crystal formation and may either penetrate or act as a shield around the membrane

12. The main function is to regulate water movement inside and outside of the cells

13. Osmolytes regulate water movement to sustain the environment inside and outside the cell

15. This is a slow process that consists of diluting the sperm, depending on the animal, with specific extenders; this is also the main method used in swine when their semen is not immediately used

17. Fresh semen is inseminated directly into the female after collection and evaluation

18. This is a device that causes semen to reach different temperatures in a period of time that ultimately freezes semen

Down

1. This type of extender was originally designed for thawing, and includes EDTA, potassium chloride, sodium bicarbonate as some ingredients

2. This prevents bacterial growth in ejaculates

3. The extender and semen should be within this range of temperature of each other at the time of diluation

4. This is a specific type of extender where lactose has the role of acting like the sugar and osmolyte

6. Product added to semen to increase the survivability and fertility of spermatozoa

7. This species is known to have used a programable freezer when freezing semen

8. This is a process that involves slow chilling, diluting with multiple extenders, and plunging into liquid nitrogen for storage

10. Maintains the acceptable pH range of the extender

14. Maintains sperm metabolism and flagellum movement, Identified as the energy source of the extender

16. In this species, the process to freeze the semen is first started by removing the seminal plasma by centrifugation