Seminal plasma contains what hormone to stimulate contractions of the FRT?

True/False: Sperm are anabolic

What acrosomal enzymes are released from a true acrosome reaction and what do they do?

Describe the difference between a true and a false acrosome reaction:

* True
* False

The ZP is made up of 3 glycoproteins. What are they?

Match the following terms to their definitions:

 Zygote Blastomere Morula Blastocyst

1. Cell that results from first cleavage of zygote still located within the ZP
2. Has a fluid filled cavity (blastocoele) from morula outer cells flattening. Composed of the ICM=embryo and trophoblast= chorion, fetal portion of placenta that produces proteolytic enzymes
3. A result of syngamy, single-celled embryo
4. A solid ball of cells (too many to count), separated into inner and outer cells.

Explain the 2 cells in the morula (inner and outer cells):

* Inner cells :
* Outer cells :

After fertilization, all cell divisions are? Why?

What 3 forces govern the blastocyst hatching?

What are the 3 prenatal growth phases?

What effect does maternal nutrition have on muscle and fat development of the conceptus?

What does MOET stand for? What does this do?

What happens if the ICM splits?

These 4 steps must be achieved before the embryo can attach to the uterus. Place them in order below:

Maternal recognition of pregnancy

Hatching of blastocyst from ZP

Development within confines of ZP

Formation of extraembryonic membranes

What are the consequences of capacitation?

What is the perivitelline space?

How does a female prevent polyspermy?

Duration of Fertilization Ability of Sperm in FRT:

|  |  |
| --- | --- |
| Species: | Fertile Life ( in days )  |
| Cow |  |
| Mare |  |
| Woman |  |