## Reproduction

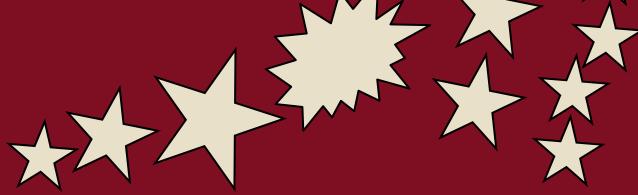
Period 3 Mike Titsworth & Mady Quest

#### Introduction to Reproduction Process

Sexual:

Germ cells are haploid but gametes are diploid, true or false?

Asexual:



## Animals Reproduce Asexually

- \* For the most part animals have left asexual reproduction behind for sexual reproduction. However some still do. They do this by:
- Budding- another organism grows out of the body through mitosis (more common for producing offspring) ex: Hydra (Small freshwater organism) and sea sponge
  - Regeneration- Losing a limb and growing it back ex: Starfish and some lizards

#### Sexual Vs. Asexual

Pros-

Genetic diversity

Cons-

Takes a long time Requires two organisms Pros-

Very quick

Only requires one organism

Doesn't have specific gender

Typically don't die from old

age Cons-

Not much genetic diversity

Why abandon a clearly more beneficial process of asexual reproduction for a more taxing process of sexual reproduction?

#### Placental Mammals

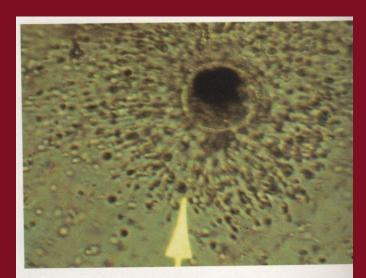


FIGURE 1. An equine ovum surrounded by an expanded cun mass, 100×. This ovum was aspirated from a follicle befor expected ovulation.



FIGURE 2. A Day 6 postovulation equine blastocyst, 100×. This blastocyst is still retained within a thick zona pellucida and ha polar bodies in close contact at its periphery. It was obtained uterine flushing for embryo cryopreservation.

# Step by step process

# What does the placenta *really* do?

## What about nonplacental mammals?





# Why is there a difference in timing? MALES VERSUS

FEMALES

