

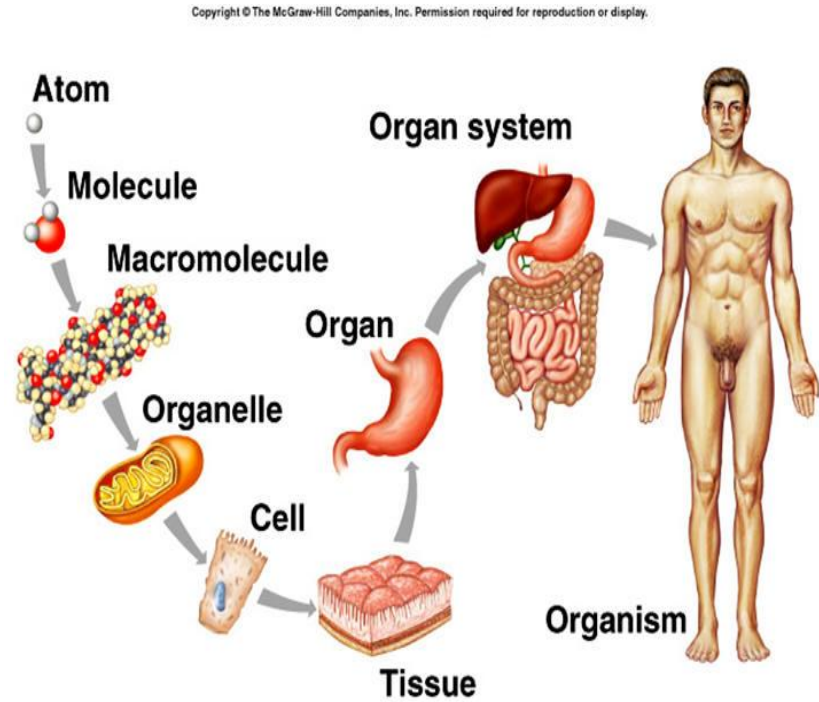
# Hierarchy & Reproduction

Packet #7

# Types of Reproduction

# Types of Reproduction

- \* On the hierarchy of biology, reproduction occurs **at two levels**
  - \* Organism Reproduction
    - \* Sexual
    - \* Asexual
  - \* Cellular {Eukaryotic Cells Only}
    - \* Sexual
      - \* Meiosis
    - \* Asexual
      - \* Cell Cycle

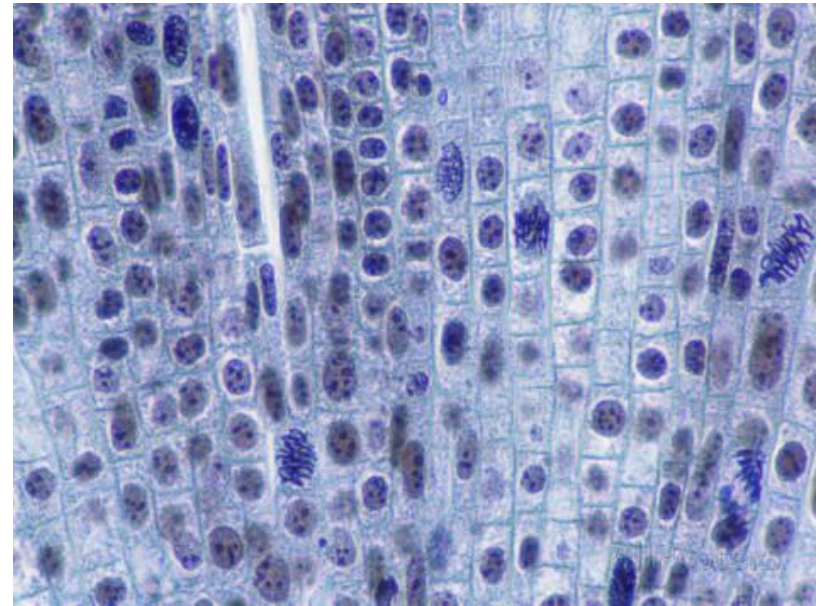


# Reproduction—Eukaryotic Cells

# Types of Reproduction II

## Cellular Reproduction—Eukaryotic Cells

- \* Cellular Reproduction of Eukaryotic Cells
  - \* Sexual Reproduction
    - \* Meiosis
      - \* Involves the combining of genes from two different individuals into new arrangements
        - \* Genes are arranged (sorted) into new arrangements.
  - \* Asexual Reproduction
    - \* Cell Cycle {Mitosis}
      - \* Involves the production of a new organism of species from a cell or cells of a single parent.
        - \* Reproduction without the sorting of genes.

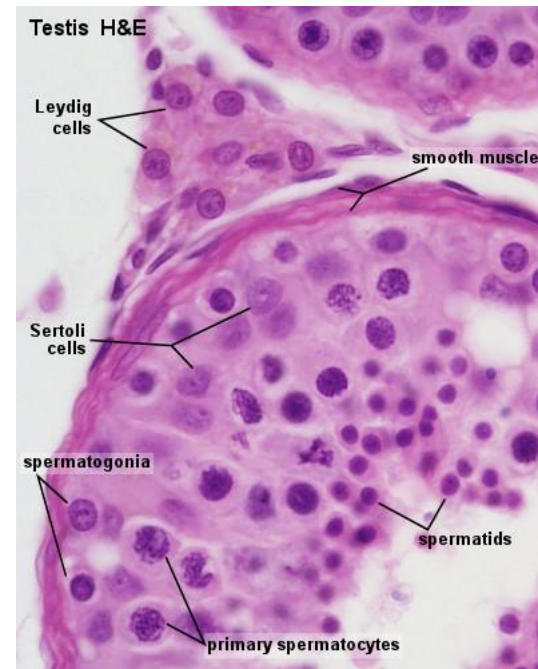
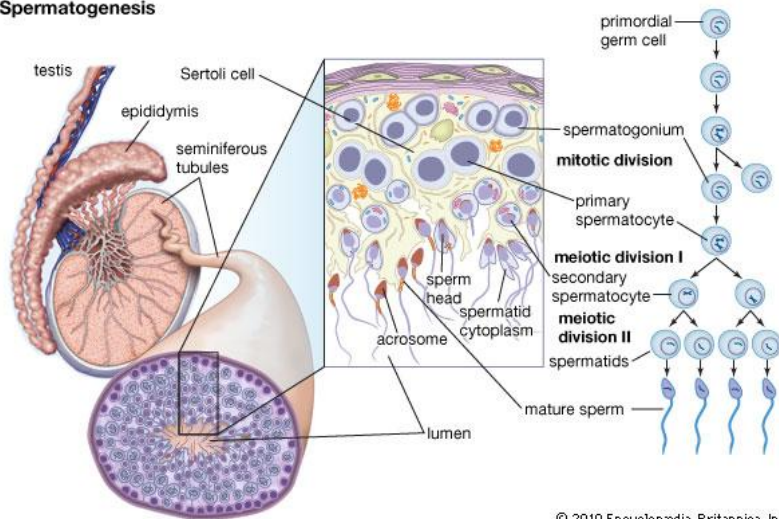


# The Human Connection

# Sperm Production

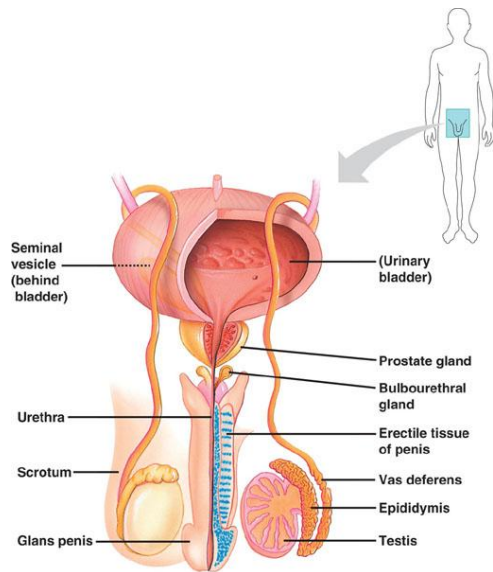
## Spermatogenesis

### Spermatogenesis

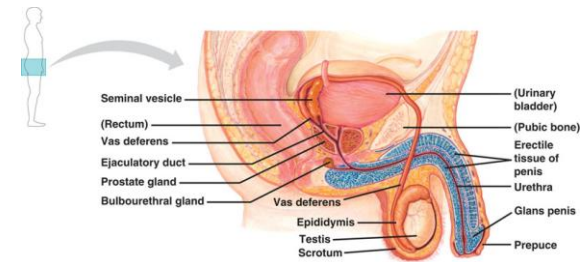


# The Male Anatomy

## Front View

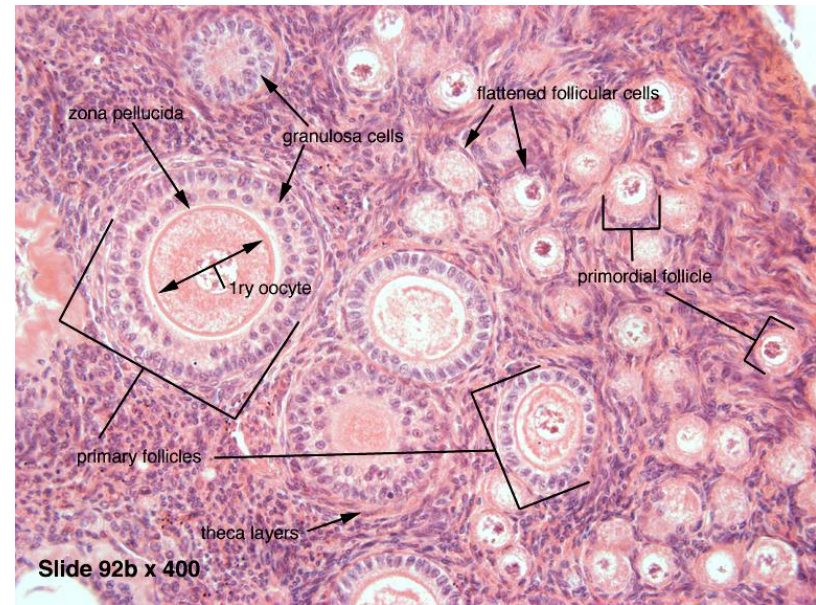
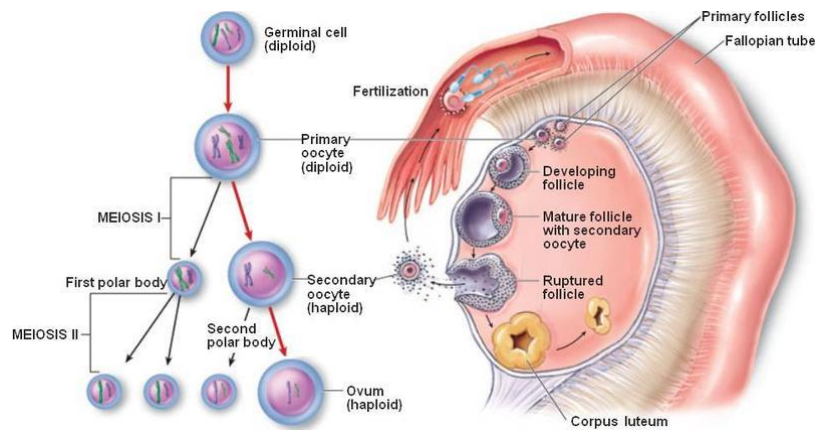


## Side View



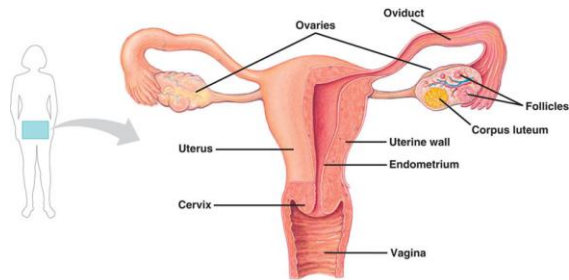


# Egg Production—Oogenesis

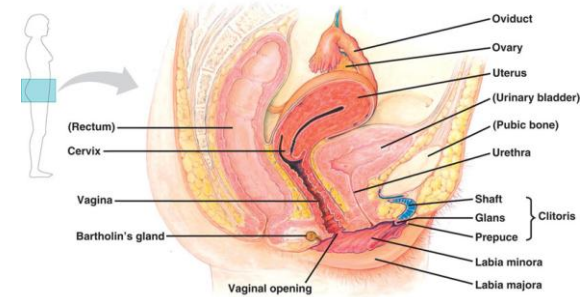


# The Female Anatomy

## Front View

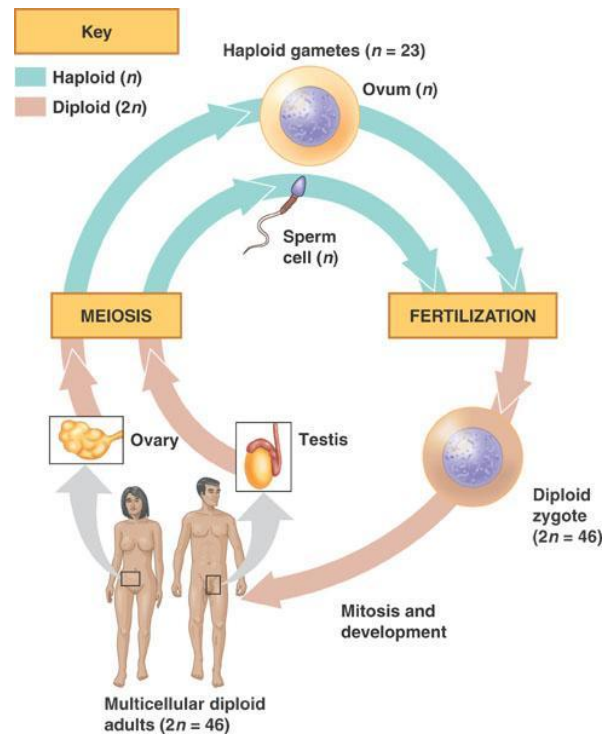


## Side View



# The Broad Picture

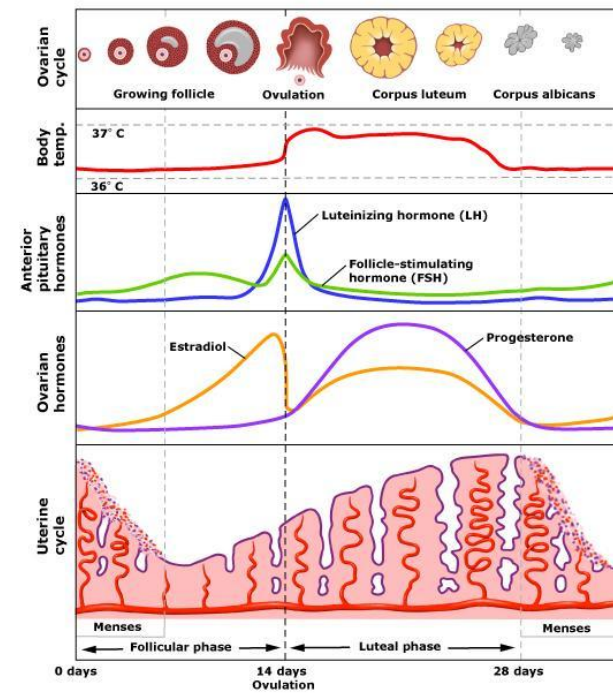
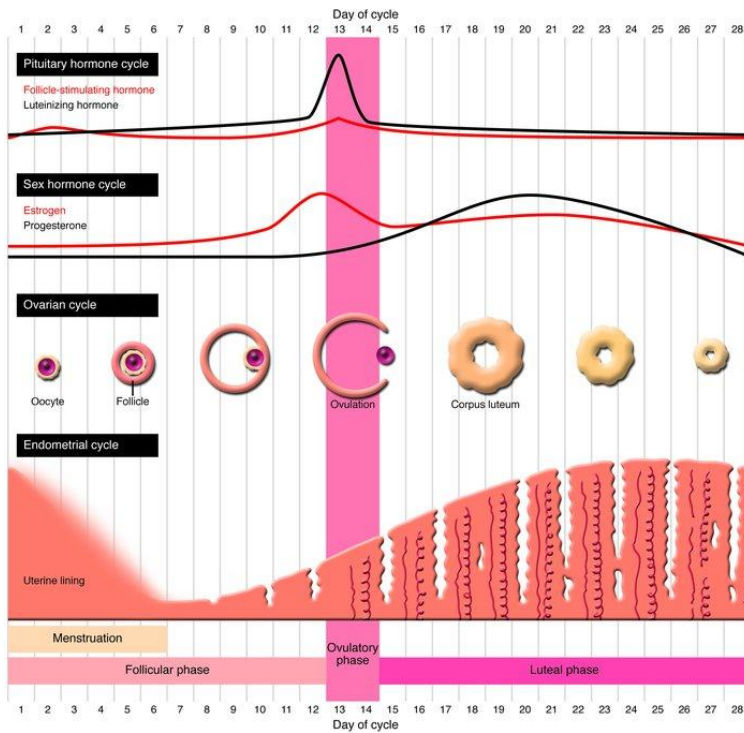
## Eukaryotic Organisms {Humans}



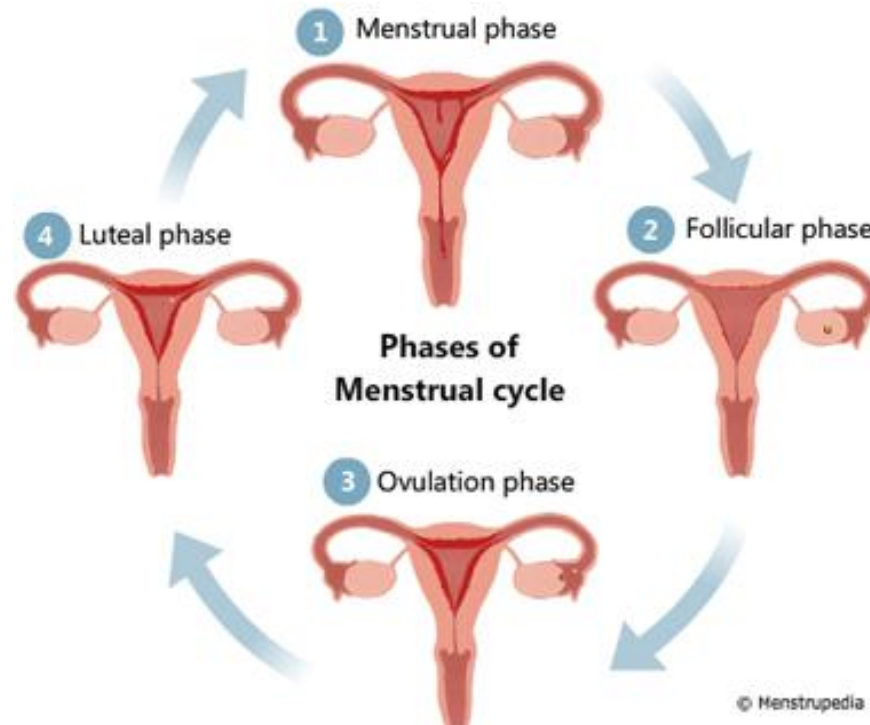
# The Human Ovarian {Menstrual} Cycle

# The Human Ovarian {Menstrual} Cycle

## I

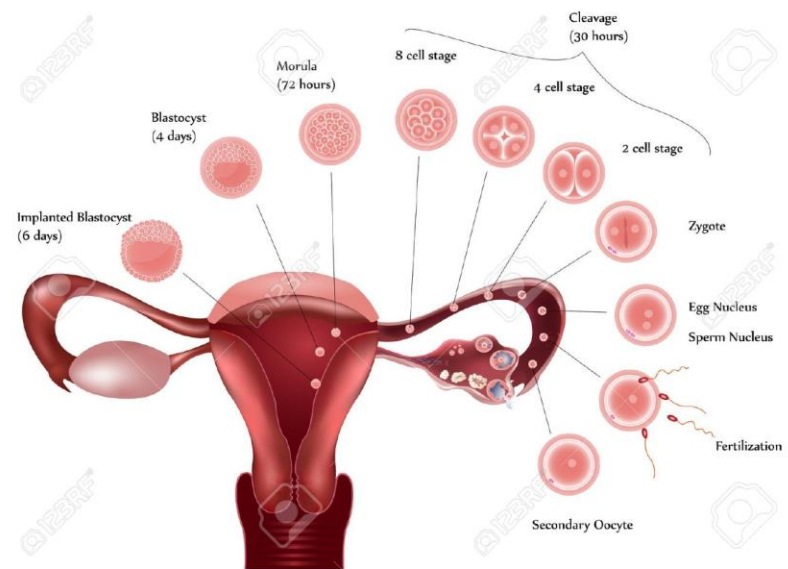
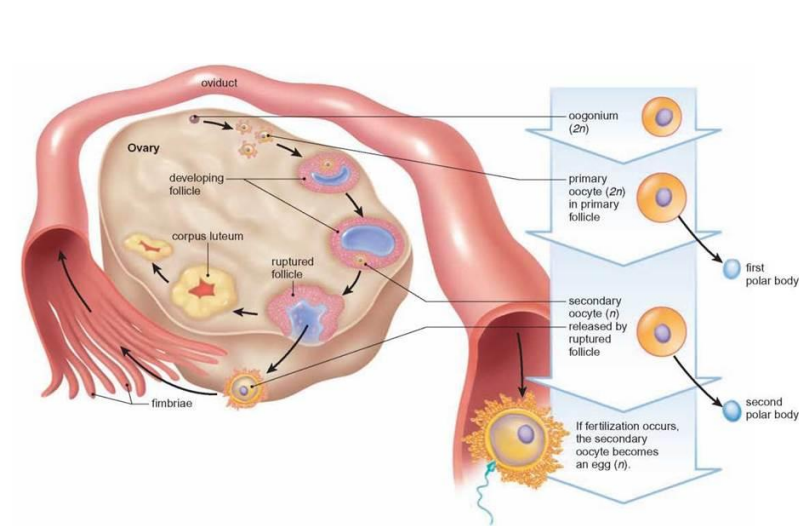


# The Human Ovarian {Menstrual} Cycle II



# The Human Ovarian {Menstrual} Cycle

## III



# Reproduction—Prokaryotic Cells



# Reproduction—Prokaryotic Cells

\* More to come later...



# Review