

Lab 4: Tissues

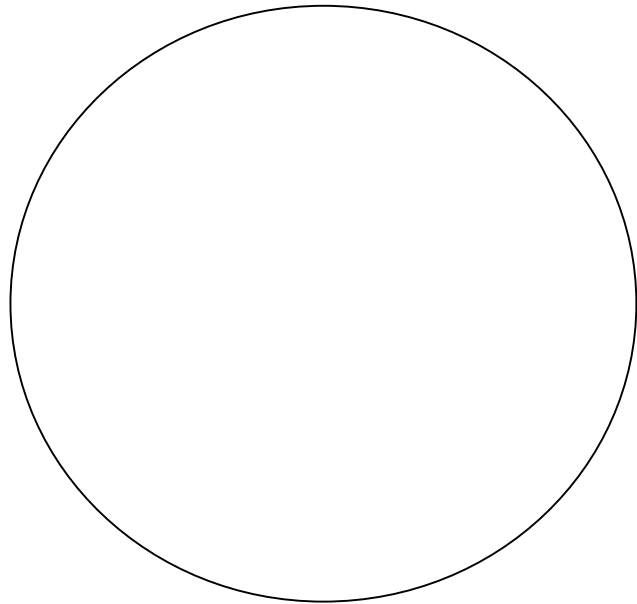
Slide Assignment: Tissues

(Exercise 6 in Lab Text, Multiple Chapters in Histology Text (see tabs for help))

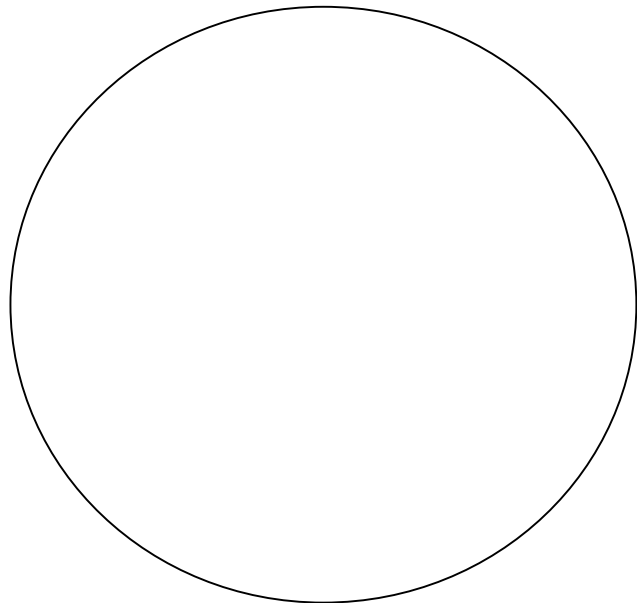
Draw the following slides using the figures in the lab and histology texts as a reference. Use whichever magnification works best to show all given structures. Please note that not every slide will show everything; you will need to look at multiple slides and/or sources. Your drawings should artistically combine views to include all structures.

Connective Tissue Proper:

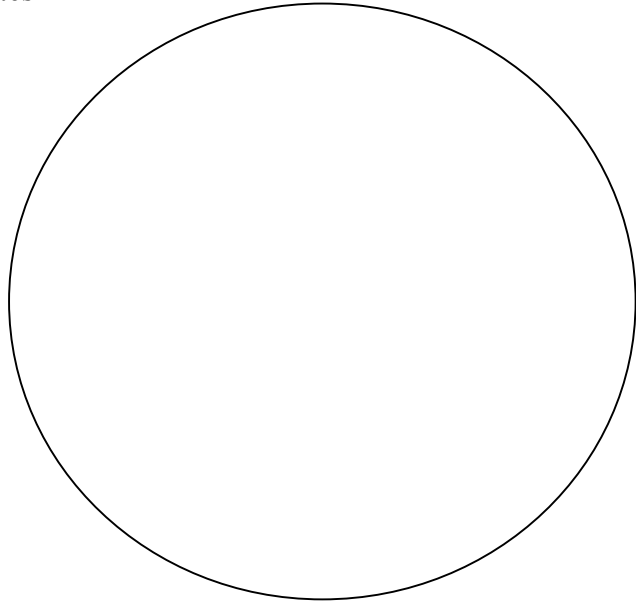
- **Loose Areolar CT** – label the slide as directed:
 - Areolar CT (whole Slide)
 - Collagen Fibers
 - Elastin Fibers
 - Fibroblast Nuclei



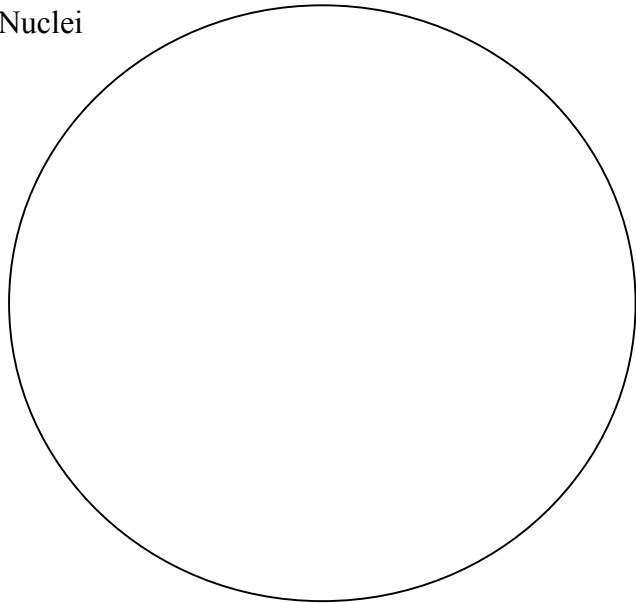
- **Loose Adipose CT** – label the slide as directed:
 - Adipose Tissue (whole slide)
 - Nuclei
 - Lipid-containing (fat) cells
 - Capillaries



- **Loose Reticular CT** – label the following slide as directed:
 - Lymph Node
 - Reticular CT
 - Reticular Fibers
 - Lymphocytes



- **Dense Regular CT** – label the slide as directed:
 - Tendon
 - Dense Regular CT
 - Collagen Fibers
 - Fibroblast Nuclei



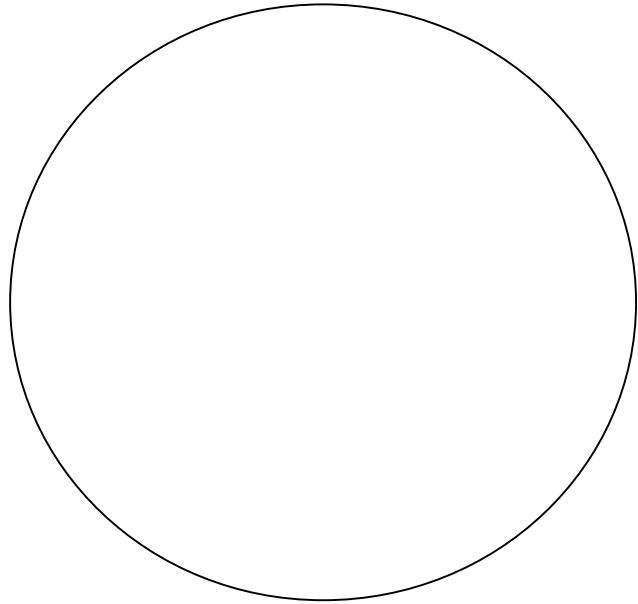
- **Dense Elastic CT** – view the Nuchal Ligament slide, but draw and label the Aortic Wall slide as directed:
 - Dense Elastic CT
 - Elastic Fibers

*You will see Smooth Muscle tissue between the Elastin Fibers. Label it!

 - Smooth Muscle

*You may also see Simple Squamous Epithelia lining the vessel. Label the epithelia and associated parts listed.

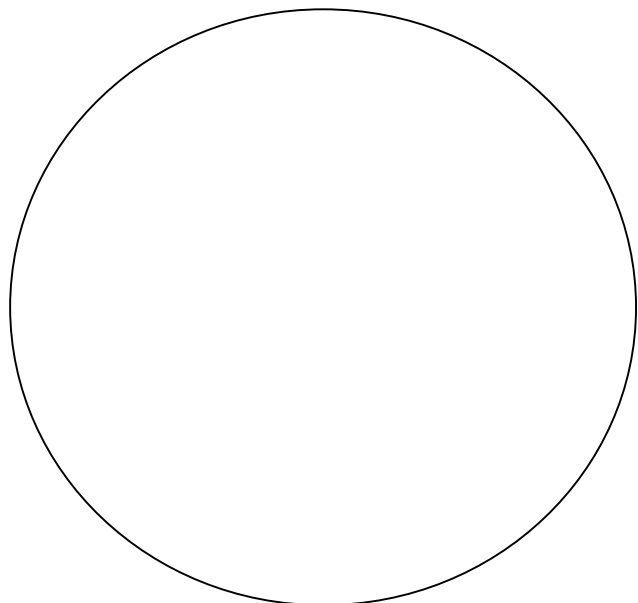
 - Simple Squamous Epithelia
 - Apical Surface
 - Basal Surface
 - Lumen



- **Dense Irregular CT** – label the slide as directed:
 - Dense Irregular CT
 - Collagen Fibers
 - Fibroblast Nuclei

*This is a section of the Epidermis and Dermis. The Dense Irregular CT makes up the Dermis, but Stratified Squamous Keratinizing/Cornified Epithelia make up the Epidermis. Label the associated structures of the Epidermis listed.

 - Stratified Squamous Keratinizing/Cornified Epithelia
 - Apical Surface
 - Basal Surface
 - Lumen

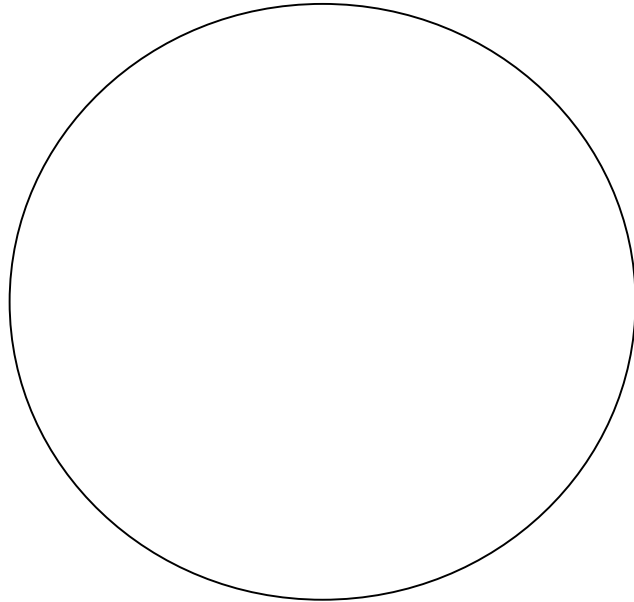


Connective Tissues - Cartilage:

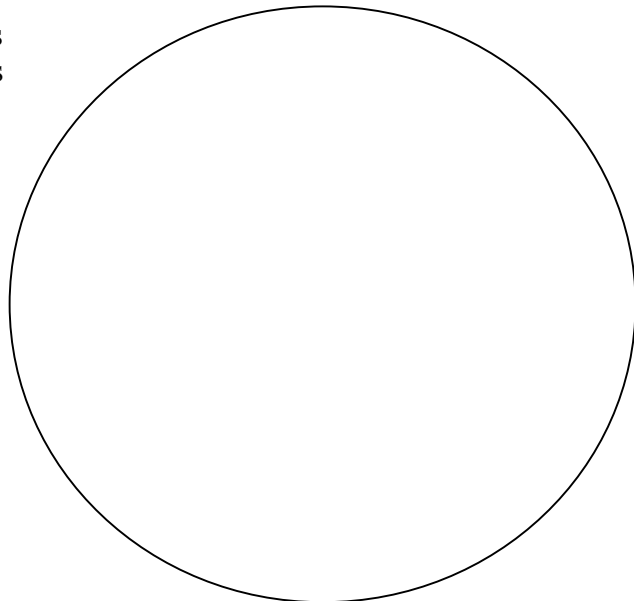
- **Hyaline Cartilage** – label the following slide as directed:
 - Tracheal Rings
 - Hyaline Cartilage
 - Chondrocytes
 - Lacuna
 - Matrix

*Since this is a slide of the Trachea, you will also see Pseudostratified Ciliated Columnar Epithelia. Label the epithelia and associated structure listed.

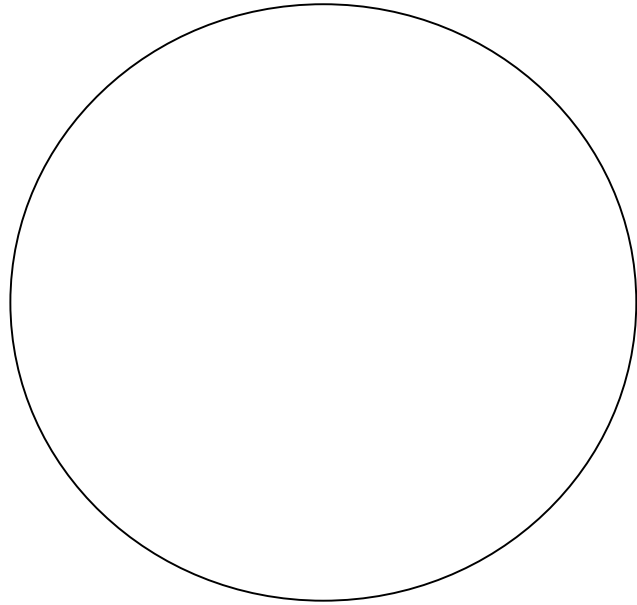
- Pseudostratified Ciliated Columnar Epithelia
 - Cilia
 - Goblet Cells
 - Apical Surface
 - Basal Surface
 - Lumen



- **Elastic Cartilage** – view the Epiglottis slide, but draw and label the External Ear slide as directed:
 - External Ear
 - Elastic Cartilage
 - Elastin Fibers
 - Chondrocytes
 - Lacuna

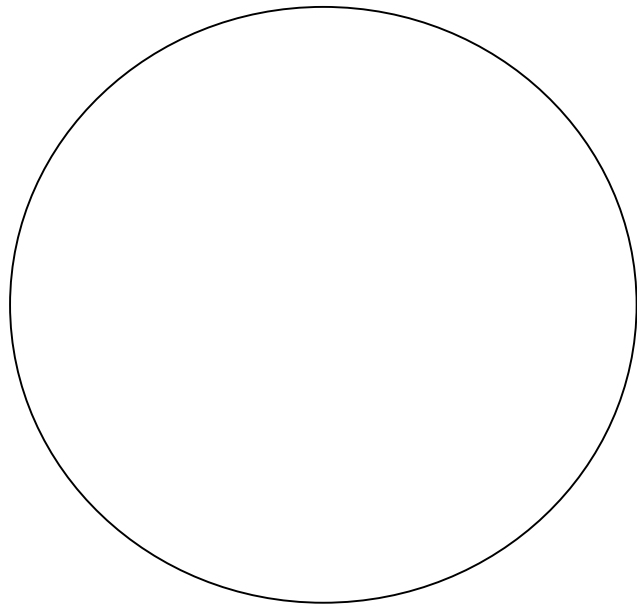


- **Fibrocartilage** – view the Meniscus & Vertebral Disc slides, but draw and label the Symphysis Pubis slide as directed:
 - Symphysis Pubis
 - Fibrocartilage
 - Collagen Fibers
 - Chondrocytes
 - Lacuna



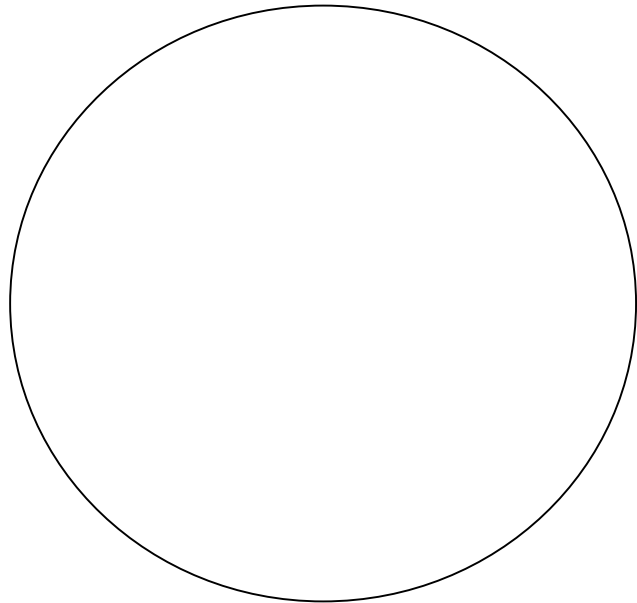
Connective Tissues - Osseous:

- **Osseous Tissue** – label the slide as directed:
 - Compact Bone
 - Osteon
 - Central/Haversian Canal
 - Lacuna
 - Lamella
 - Osteocyte



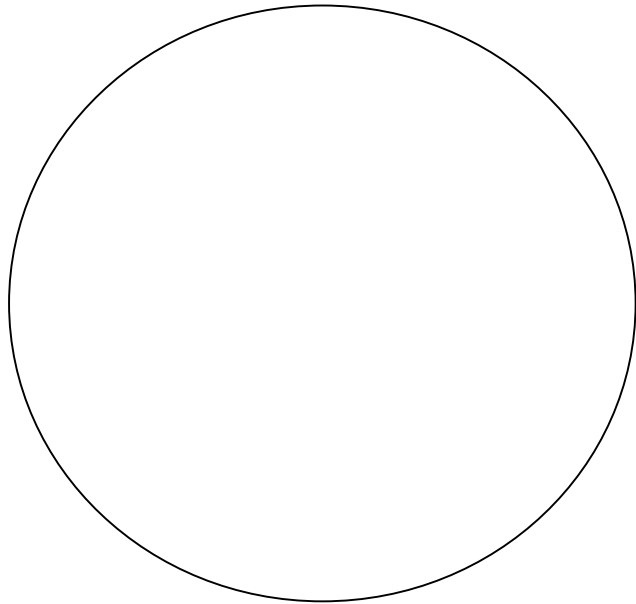
Connective Tissues - Blood:

- **Blood** - label the slide as directed:
 - Blood Smear
 - Erythrocytes (Red Blood Cells)
 - Leukocytes (White Blood Cells)
 - Platelets
 - Plasma



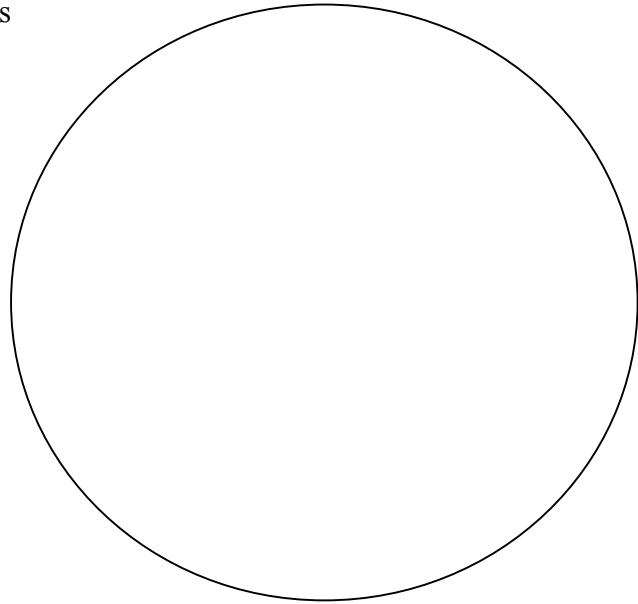
Nervous Tissue - label the slide as directed:

- Spinal Cord
 - Neuron
 - Cell Body
 - Axon

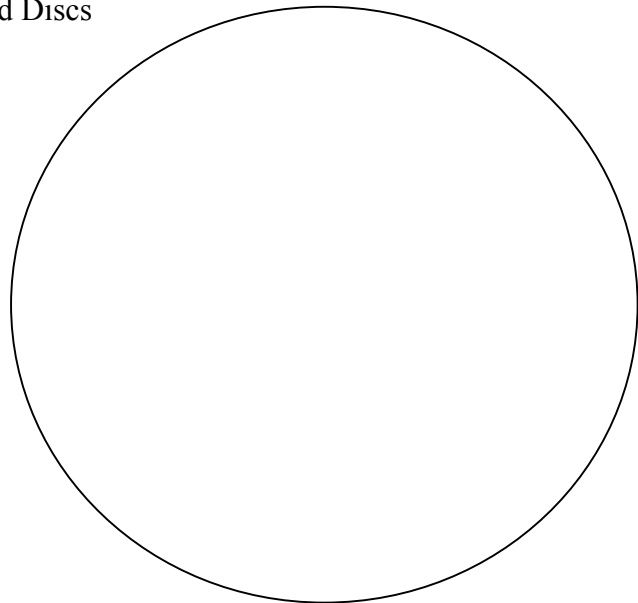


Muscle Tissue:

- **Skeletal Muscle** – draw & label a longitudinal section as directed:
 - Striated Muscle
 - Muscle Fiber
 - Nuclei
 - Sarcomeres



- **Cardiac Muscle** – view a teased section, but draw & label a longitudinal section as directed:
 - Cardiac Muscle
 - Muscle Fiber
 - Nuclei
 - Sarcomeres
 - Intercalated Discs



- **Smooth/Visceral Muscle** – draw & label a longitudinal section as directed:
 - Visceral Muscle
 - Muscle Fiber
 - Nuclei

