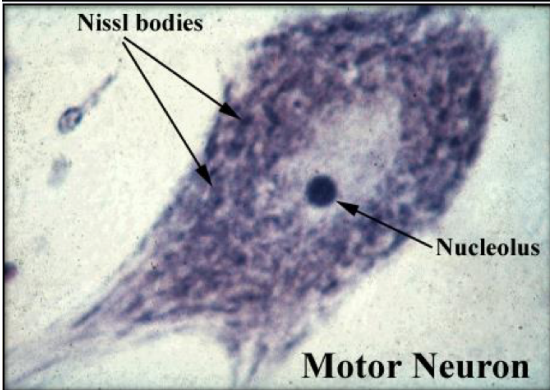


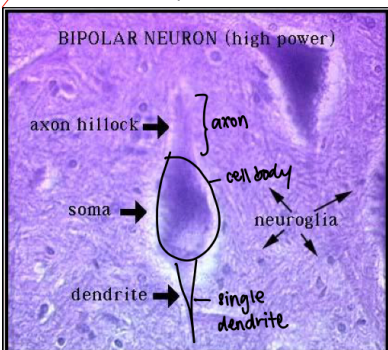
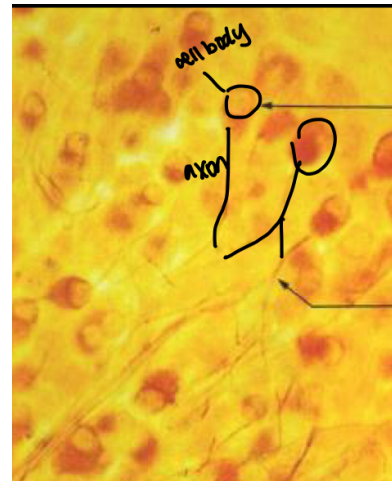
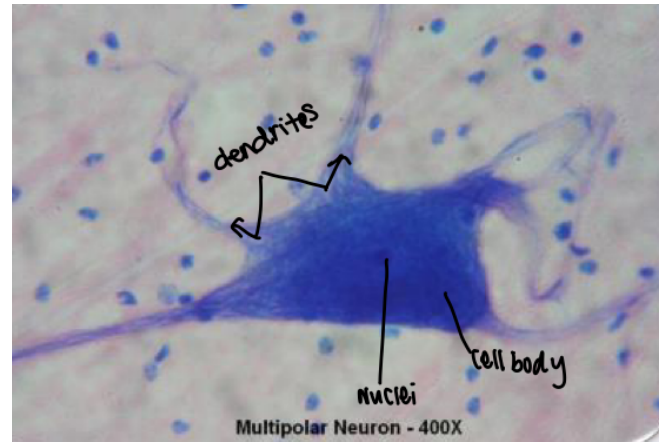
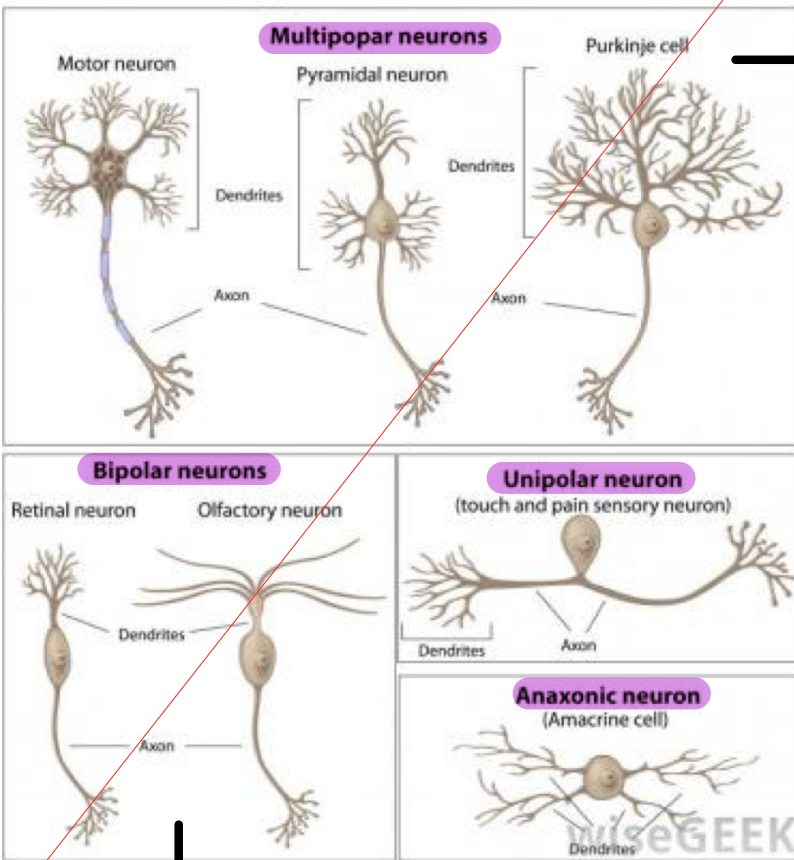
Nervous Tissue

Cell Body

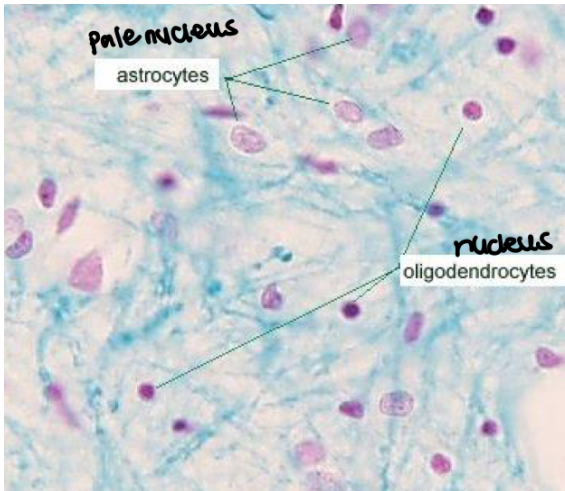
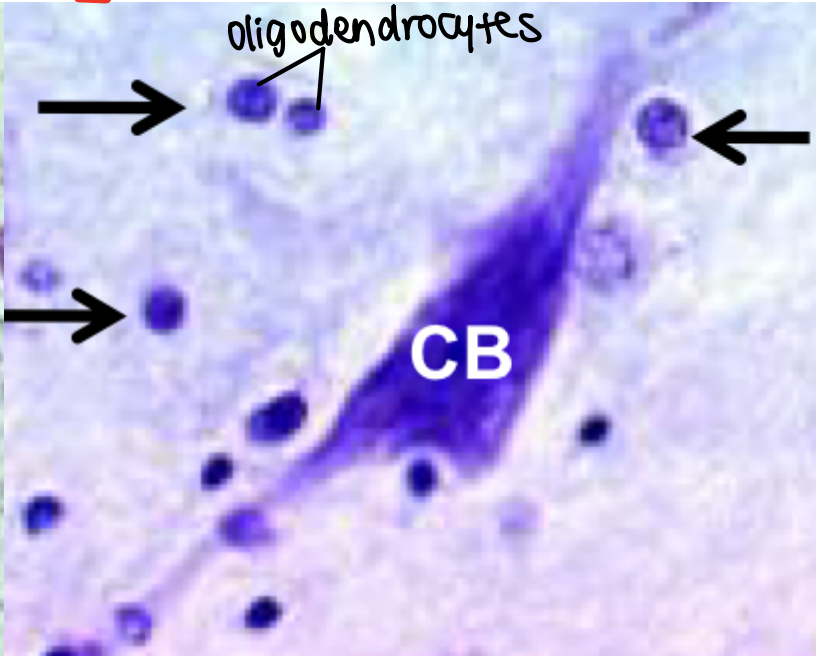
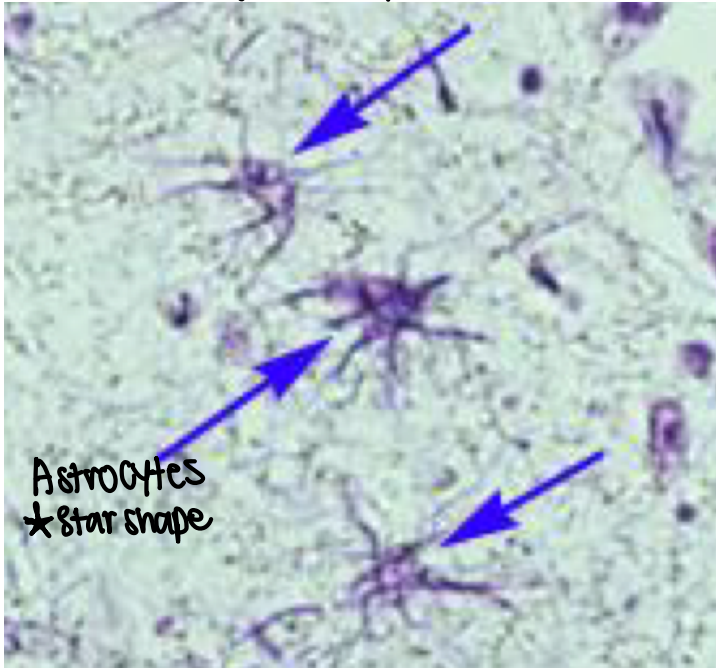


Neuron Type

Types of Neurons

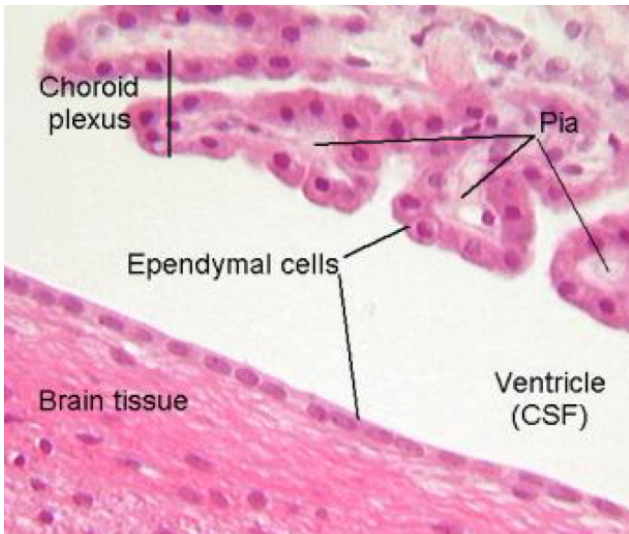


Neuroglia $\left\{ \begin{array}{l} \text{Astrocytes - star shaped} \\ \text{oligodendrocytes - surrounds cell body} \end{array} \right\}$ CNS



★ Not really expected to differentiate.

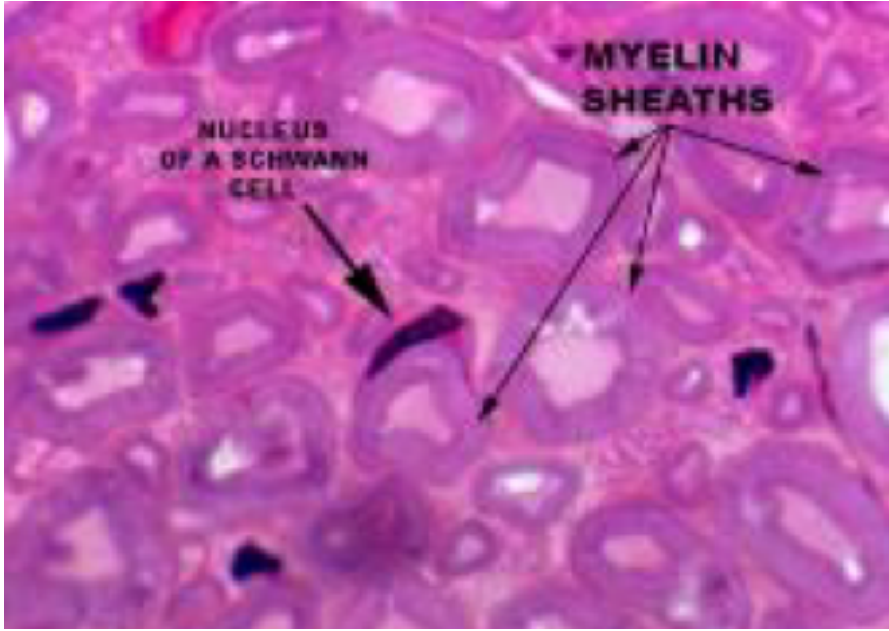
Ependymal Cell



- may have cilia or microvilli
- cuboidal - columnar epithelial cell
- lines fluid-filled cavities of brain & spinal cord

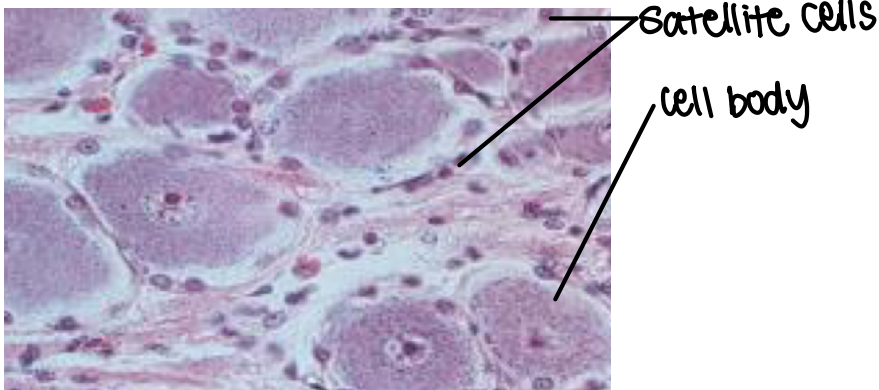
Neuroglia $\left\{ \begin{array}{l} \text{Schwann Cells} \\ \text{Satellite Cells} \end{array} \right\}$ PNS

Shwaan Cells

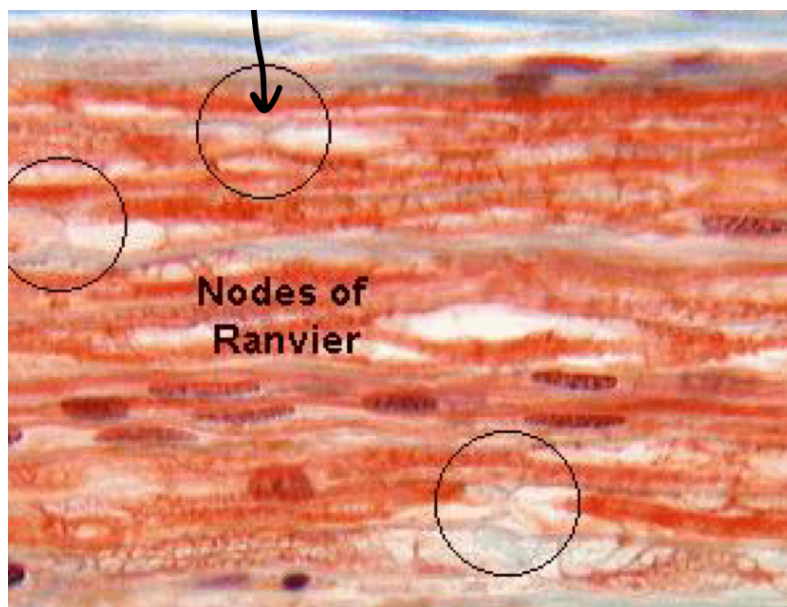
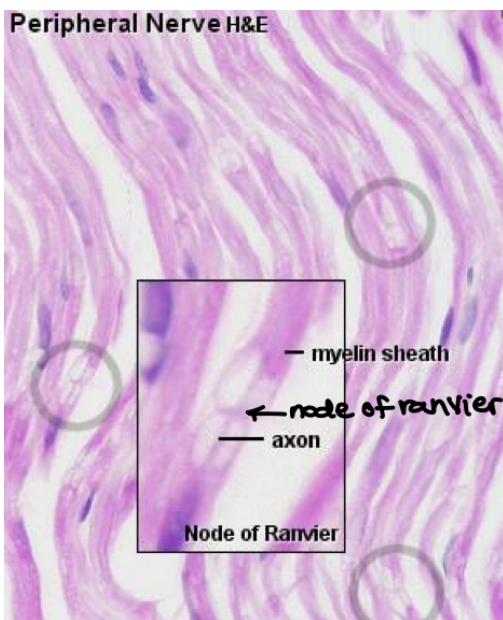


• surrounds axons in PNS

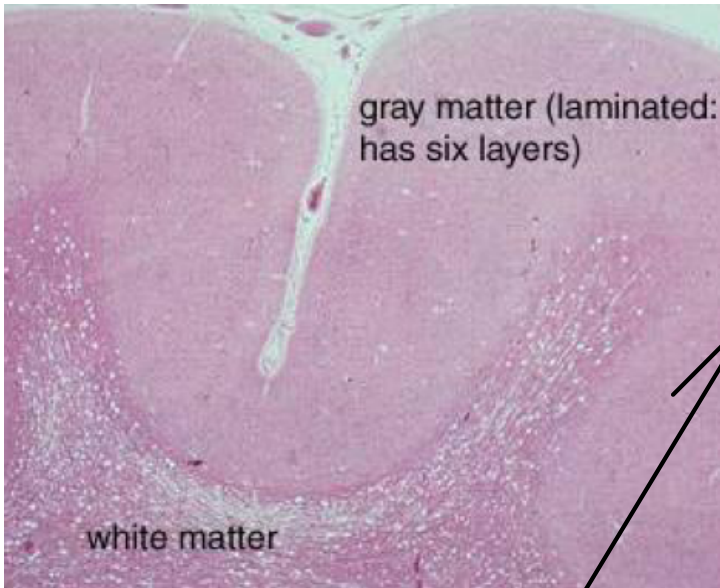
Satellite Cells



Node of Ranvier



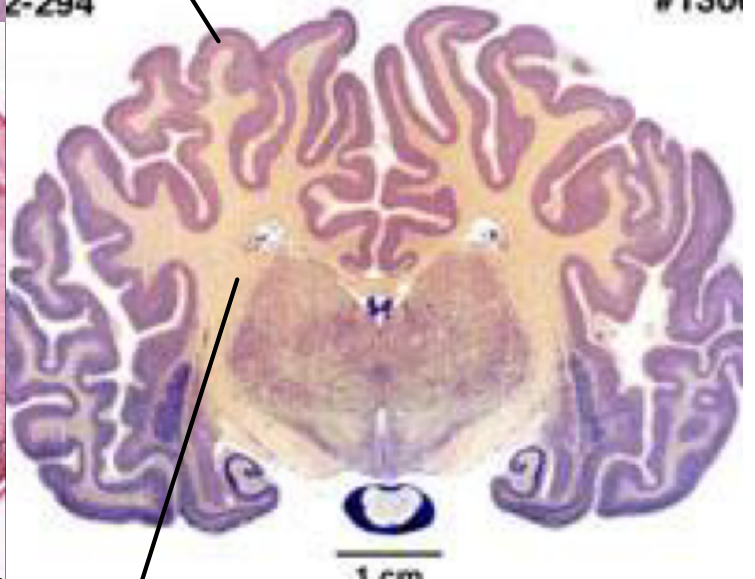
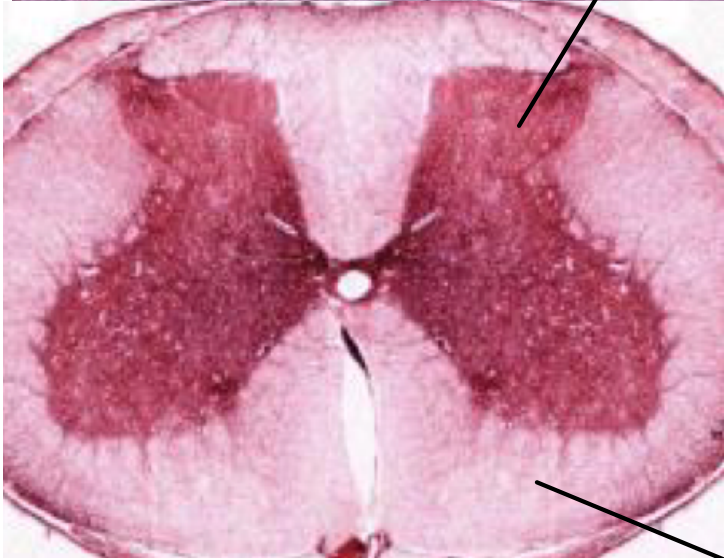
Grey and White Matter



• white matter → speckly
 ↳ axons
 ↓
 myelinated

• Grey matter → Axon unmyelinated
 ↳ neuron cell body

| | Brain | Spinal Cord |
|-------|---------|-------------|
| Grey | outside | inside |
| White | inside | outside |



white matter

Histology of Brain & Spinal Cord

- Three layers of connective tissue surround the brain & spinal cord
- Collectively they are called the **meninges**
- Individually, they are:

Dura mater

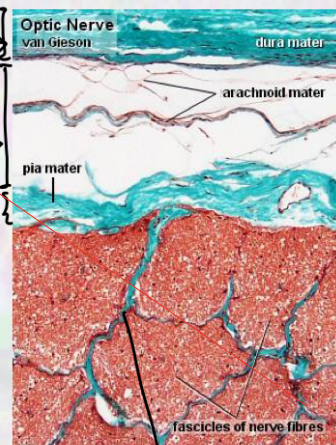
- outer layer
- tough, fibroelastic connective tissue

Arachnoid membrane

- middle layer
- fine, cobweb-like
- spaces filled with CSF

Pia mater

- inner layer
- very fine reticular & collagen fibres
- blood vessels



Nerves