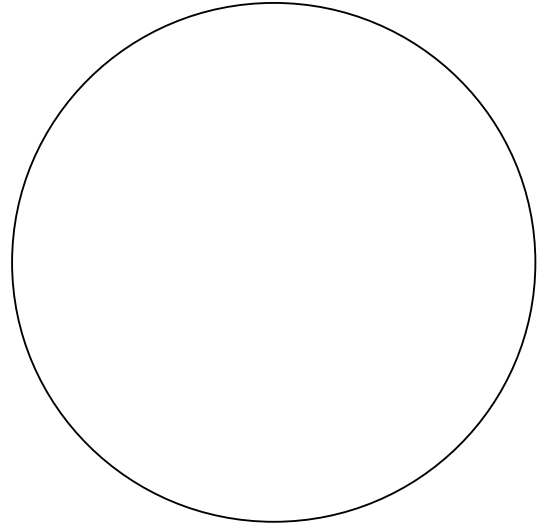


Spinal Cord Slide (H1550, 31-3726)

Draw and label what you see at 2.5x or 4x

- The slice is a cross-section (for example, a slice or cross-section of a tube is a circle). Though the basic shape of this slice is an oval, the *dorsal* (meaning _____) side has a bump (or several bumps) on it, and the *ventral* (meaning _____) side has a groove in it.
- The spinal cord slice has "bilateral symmetry." This means that the right and left sides are mirror images of each other.
- The thin *dura mater* is visible around the slice.
- The middle of the spinal cord looks like a butterfly – its "wings" are called "horns." The back thin ones are called "*dorsal horns*" and the front fat ones are called "*ventral horns*."
- In the center is a hole called the *central canal*.

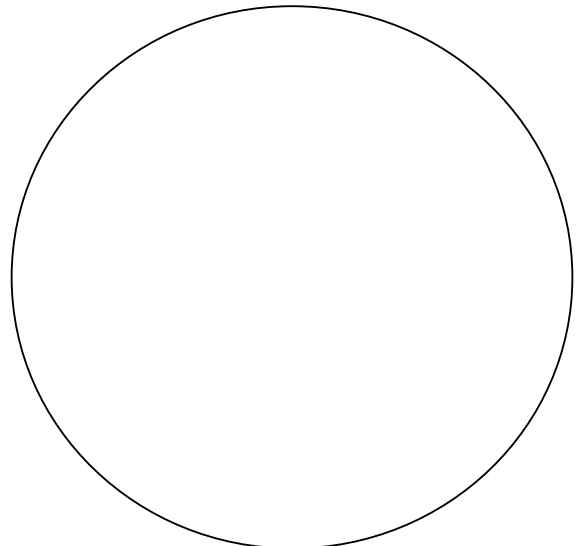


Where is the cervical part of the spinal cord in a human?

Dorsal Root Ganglion Slide (31-3792)

Draw and label what you see at 20x

- Ganglia (plural of ganglion) are bundles of the cell bodies of all the sensory neurons that send information into the spinal cord from one area of the body.
- They are located just outside the spinal cord on the dorsal side.
- In the slice of ganglion, the round *cell bodies* take up most of the main part of the slice and are stained all different shades of brown

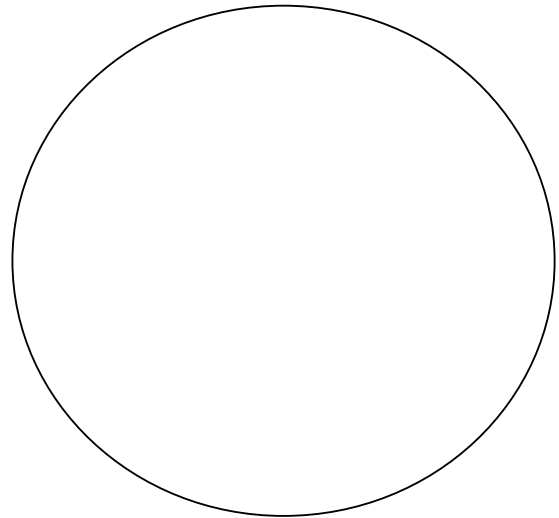


What do you notice the most about the spinal ganglion neurons?

Cerebrum Slide (H-1490, 31-3624)

Draw and label what you see at 10x

- The cerebrum is folded. This slide shows just 1 or 1.5 folds.
- At first glance, this tissue seems to be all yellow-brownish with no cool features.
- Through 10x power you might be able to see a faint whitish line that is showing the edge of the white matter. White matter is axons covered with myelin and is found towards the inside of the brain.
- The tissue towards the outer edge of the fold is *dendrites* and *cell bodies*. It is called "*grey matter*" but it is stained yellowy-tan to help it show up better under the microscope.

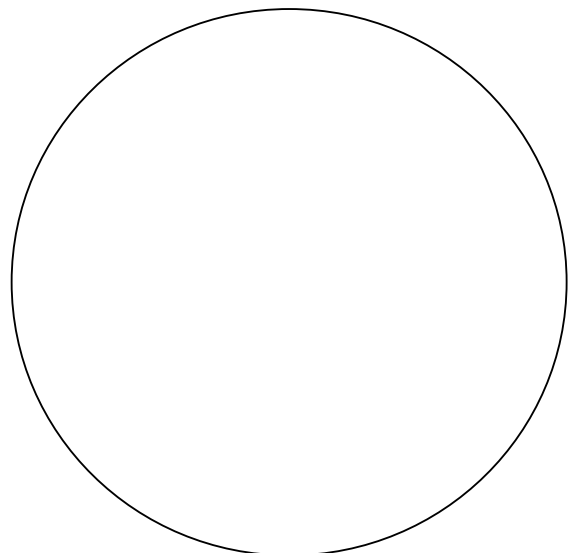


Remember that the cerebrum is the part of the brain that has ____ (number) lobes. For extra credit, list the four lobes and their functions:

Cerebellum Slide (H-1510, 31-3666)

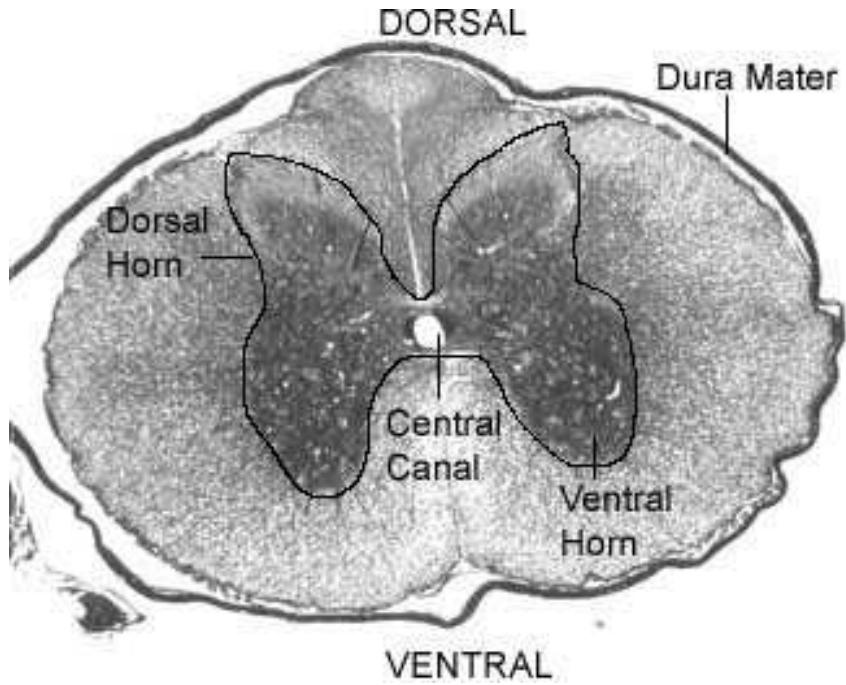
Draw and label what you see at 20x

- The cerebellum is responsible for helping a body to _____
- This slide is a thin slice taken from the edge of the cerebellum. The cerebellum is a LOT more folded than the cerebrum – you can see many folds in this tiny sample.
- The outer edge of the folds is made up of *dendrites* (stained a whitish pinkish tannish color). The inner tissue is made up of *axons* (stained dark brown and tan).
- Using 20x power, in some places you can see a line of black dots between the dendrite tissue and the axon tissue. These dots are the *cell bodies* of "Purkinje cells." These neurons put together all the information coming into the cerebellum and then send signals to the motor control areas of the brain.

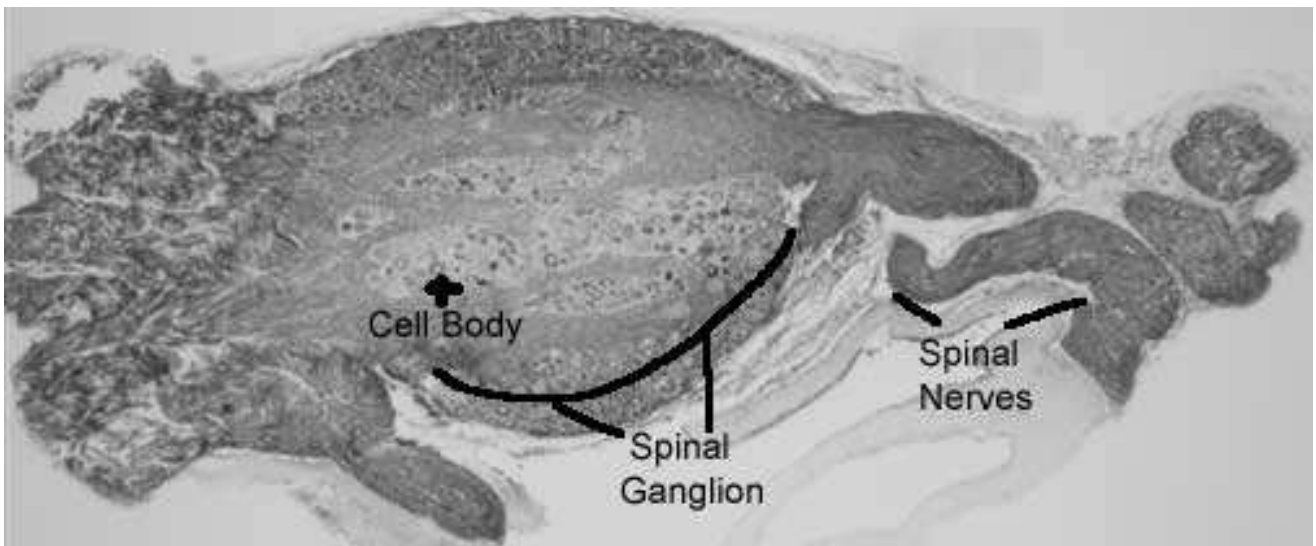


How are cerebellar cells arranged? _____

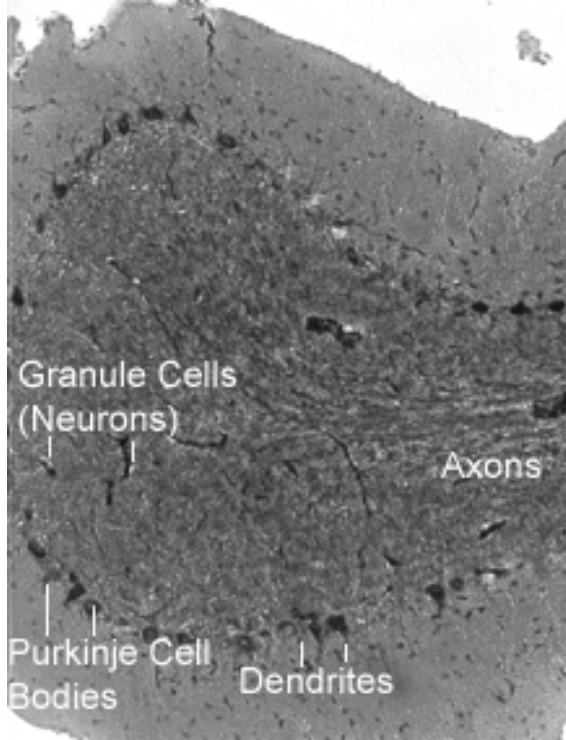
Cervical Spinal Cord



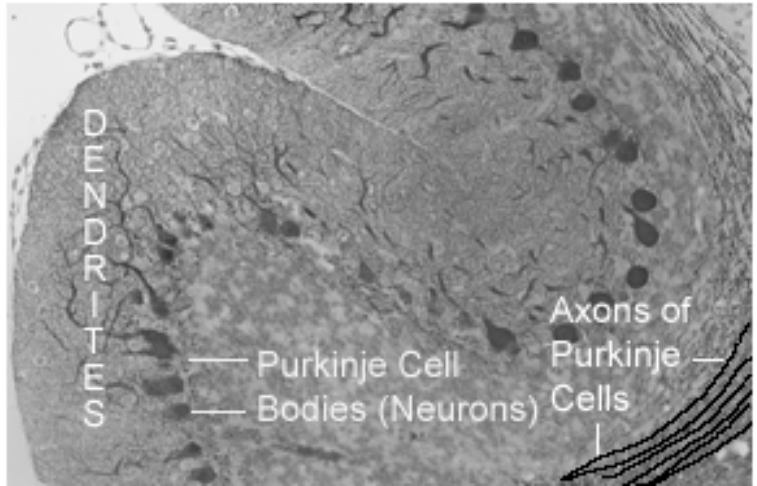
Mammalian Spinal Ganglion and Nerve at 2.5x



Mammalian Cerebellum at 10x



Mammalian Cerebellum at 20x



Mammalian Cerebrum at 10x

