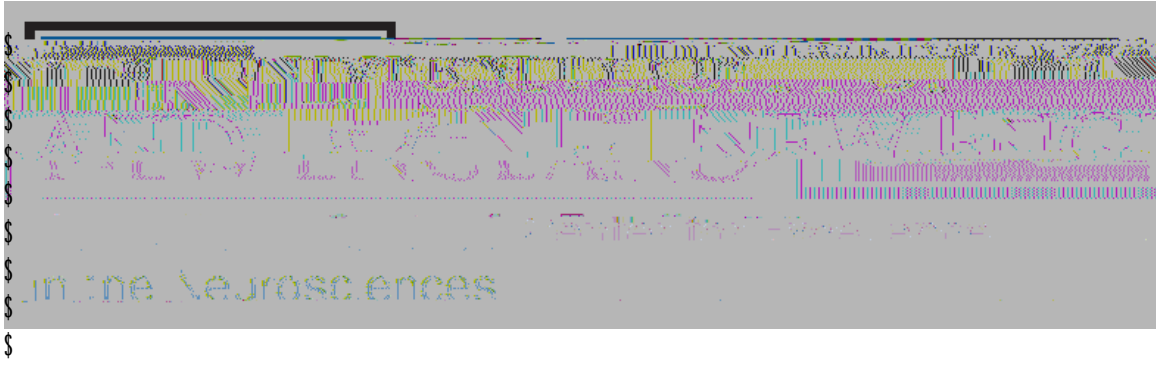


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Procedure:

Ask the students the following questions:

- Working in groups, the students will collaborate their current knowledge of brain/neuron anatomy.

Draw a picture of a neuron.

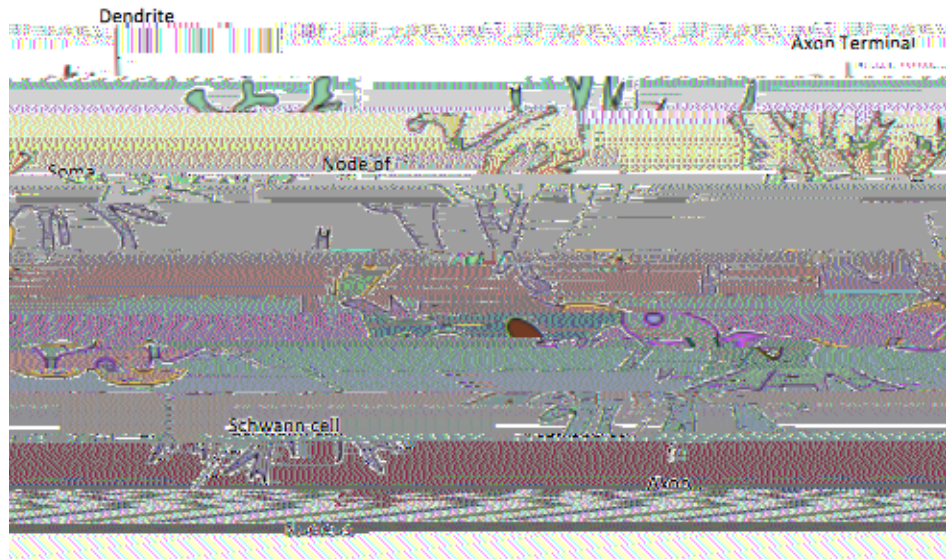
What does each part of the neuron do? Label as many as they can, briefly discuss with each other.

With a simple brain diagram label as many parts of the brain you know and if you know the function, write that as well.

- Neuron discussion
- Comparative animal anatomy
- Sheep brain dissection

- Neuron Dissection: discuss the parts of the neuron as you draw it on the board. Allow the students to draw one on a piece of paper as well.

	The branching process of a neuron that conducts signals toward the cell.
	The body of an organism, or "cell body"



- Comparative Animal Anatomy

Using observations, allow the students to describe the visual differences between a rat, mouse, sheep, and human brain.

How are the brains alike and different?

Use a sheet of paper to describe why we have sulci and gyri on our brain. The sheet of paper represents all the surface of our brain, but it has to fit into our heads so it gets crumpled up and “stuffed” into our skull, creating bumps and creases. Crumple up the sheet of paper to fit it inside your hand, which is representing the head.

Compare the sulci and gyri of the rat brain to the human brain. The human brain has the bumps and folds (sulci and gyri) because it has more surface area that needs to fit inside our head. The larger amount of surface area allows for more neurons and a larger brain.

- Sheep Brain Dissection

Define the term

: 1) The tendency of an organism or a cell to regulate its internal conditions, usually by a system of feedback controls, so as to stabilize health and functioning, regardless of the outside changing conditions

(2) The ability of the body or a cell to seek and maintain a condition of equilibrium or stability within its internal environment when dealing with external changes

Be sure to explain safety precautions and apply gloves.



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	medulla. It has several functions including controlling autonomic functions, arousal, and relaying information.
	A part that is a continuation of the spinal cord to the brainstem. It has several functions such as the control centers for the heart and lungs.

- Did the CEN Outreach volunteer teach the student objectives?
- Did the CEN Outreach program reach the goals of the teacher?
- Did the CEN Outreach program reach it's own goals/objectives?

- <http://www.biology-online.org/dictionary/Homeostasis>

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- MS-LS1-1 Conduct an investigation to provide evidence that living things are