## What is a Neuron?- AP

Main	Divisions of Nervous System					
0	Central Nervous System (): brain and spinal cord					
0	Peripheral Nervous System (): all neurons outside CNS					
Types	s of Neurons					
0	o Sensory () neurons					
	■ Carry from the sensory receptors					
	■ Cutaneousorgans					
	<ul><li>detect stretch or tension</li></ul>					
0	Motor () neurons					
	■ Carry from the central nervous system					
0	Interneurons ()					
	■ Found in in the central nervous system					
	sensory and motor neurons					
	Properties of Neurons					
0	: ability to respond to stimuli					
0	: ability to transmit an impulse					
	■ The plasma membrane atis polarized					
	Fewer ions are inside the cell than outside the cell					
	Characteristics					
0	cells					
0	Require and glucose					
0	Receive input,, produce a response					
	on Structures					
0	: receives stimulus from other neurons or sensory					
	receptors					
0	·					
	■ stimulus					
	■ Contains a nucleus					
0	: transmits stimulus to a gland, muscle, organ, or other neuron					
0	Sheath					
J	■ Fatty, protective wrapping around excellent insulator					
	gaps in myelin sheath where action					
	potentials develop					
	Myelinated axons conduct action potentials more quickly (					
	•					
	) than unmyelinated due to Nodes of Ranvier.					
	•: disease of myelin sheath that causes					
	loss of muscle function					
0	Synapse					
	■ Where an axon to a muscle, gland, organ,					
	or other neuron					
	<ul><li>Involved with of neurotransmitters</li></ul>					

	• Ex	(. <u> </u>		junction
	Cells: Neuroglia			
0			_ Characteristics	
	■ Supportin	g ce	ells for neurons	
	<ul><li>More</li></ul>		than ne	eurons
■ Can to produce more cells				more cells
	<u> </u>		types	
<ul><li>Net</li></ul>	uroglia Types			
	■ In the CN	S		
	• As	stroc	cytes	
		0		glia cells in the brain and spinal
			cord	
		0	Process that extends	between neurons and capillaries
			■ Provision of	to the nervous
			tissue	
		0	Take up neurotransm	nitters
	•		Cells	
		0	Line the	portions
			■ Ex:	and central canal of
			spinal cord	
		0	h	nelp circulate cerebrospinal fluid
	•			Cells
		0		sheath
	■ In the PN	S		
	•		cells	8
		0	Produce myelin shea	th
	•		Glia cells	
		0	Line the	surface of neurons
		0	Sensitive to	and may exacerbate
			pathological pain	