(.5pt) The propagation of an action potential from node to node along a myelinated axon is called:
   a) saltatory conduction
   b) an inhibitory postsynaptic potential
   c) nodes of Ranvier
   d) an excitatory postsynaptic potential

(1pt) Neurotransmitters are released from synaptic vesicles into the__________, where they attach to receptor sites on the__________
   a) inhibitory neuron, presynaptic membrane
   b) presynaptic membrane, axon
   c) synaptic cleft, postsynaptic membrane
   d) synaptic cleft, inhibitory neuron

(1pt) Diffusion is the movement of particles from _______to _______concentration.

(1pt) Which of the following are in greater concentration outside the cell (there may be multiple correct):
   a) Na⁺
   b) Cl⁻
   c) Large Negative Proteins
   d) K⁺

(1.5 Pts/.25ea) Using the numbers in the picture below, match the following with the corresponding number(s) on the graph
   ______ Relative Refractory Period
   ______ Repolarization
   ______ Hyperpolarization
   ______ Depolarization
   ______ Absolute Refractory Period
   ______ Voltage Gated Na⁺ Channels Close

(1pt) Depolarization of the postsynaptic membrane produces an ________, whereas hyperpolarization produces an ____________.
   a. IPSP, EPSP
   b. EPSP, IPSP
   c. action potential, inhibitory potential
   d. autoimmune response, autoimmune inhibition
(1pt) ___________ summation is when potentials are combining over different locations on a neuron, while ___________ summation is the combined effects of potential over time.

**(1pt) Bonus: In a myelinated axon where might Voltage-Gated Na⁺ channels not be found:

(3pts) a) What is the sodium potassium pump and b) why is it important c) and why ATP is needed (Please give specifics about what/how much it is pumping, reasons it is pumping, and incorporate the forces the pump is counteracting)