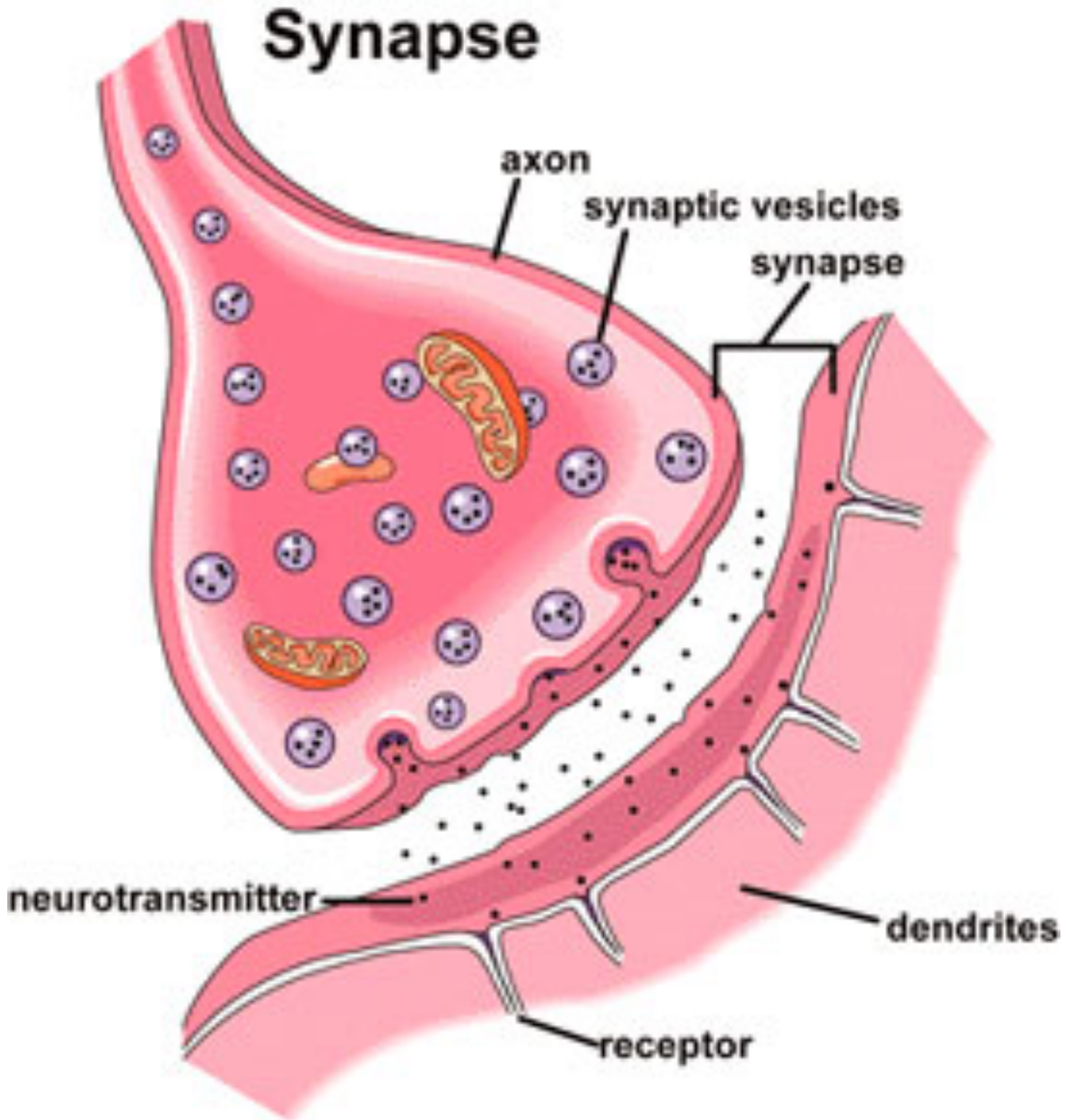
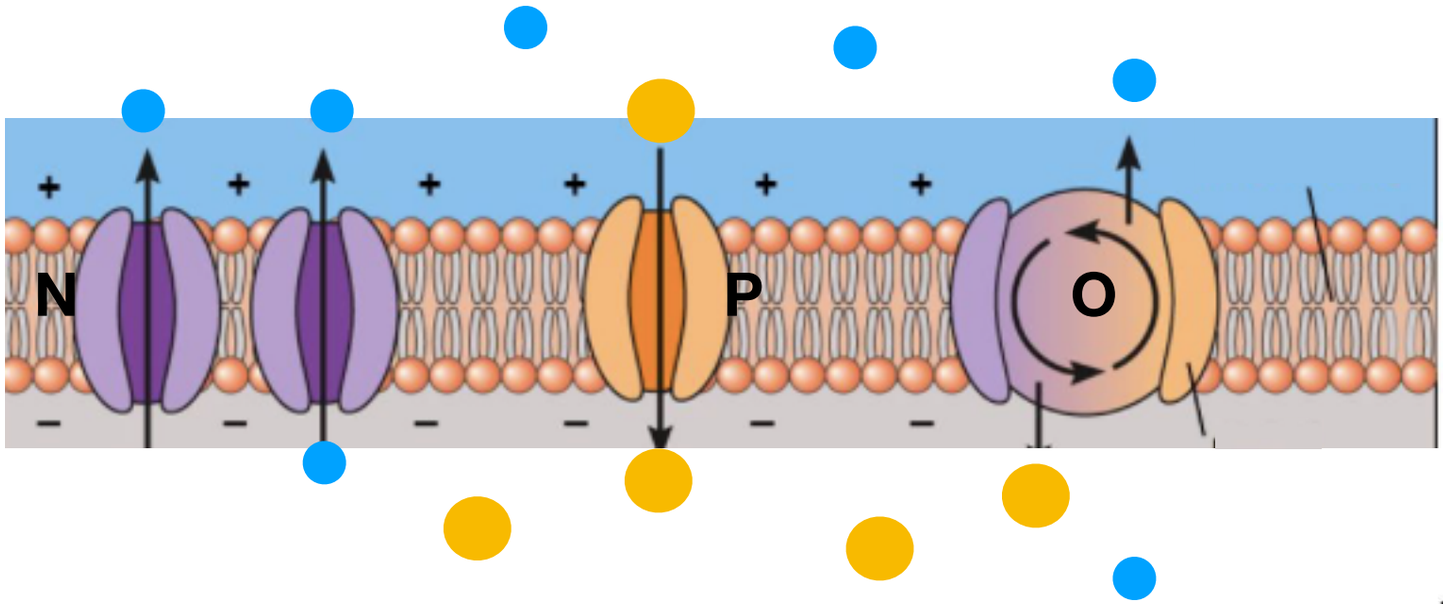
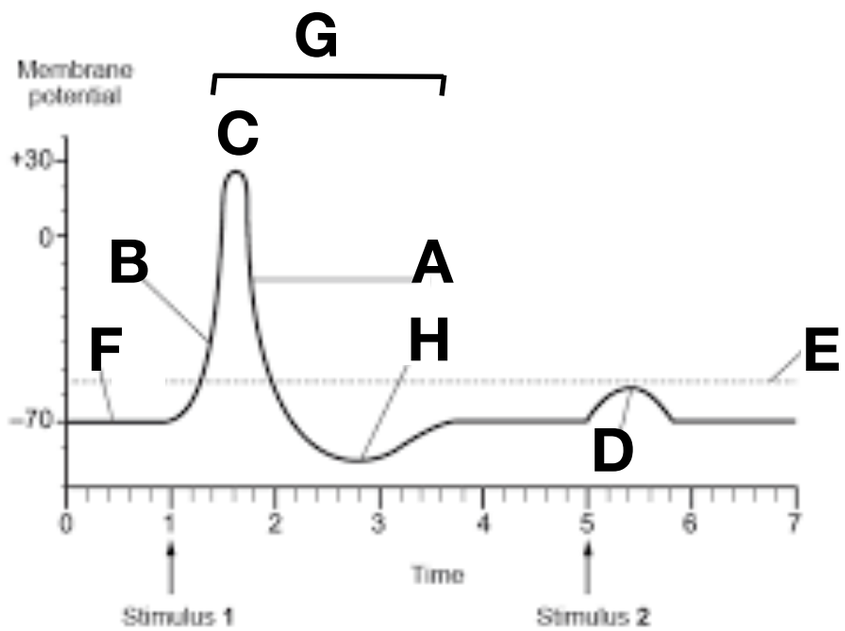
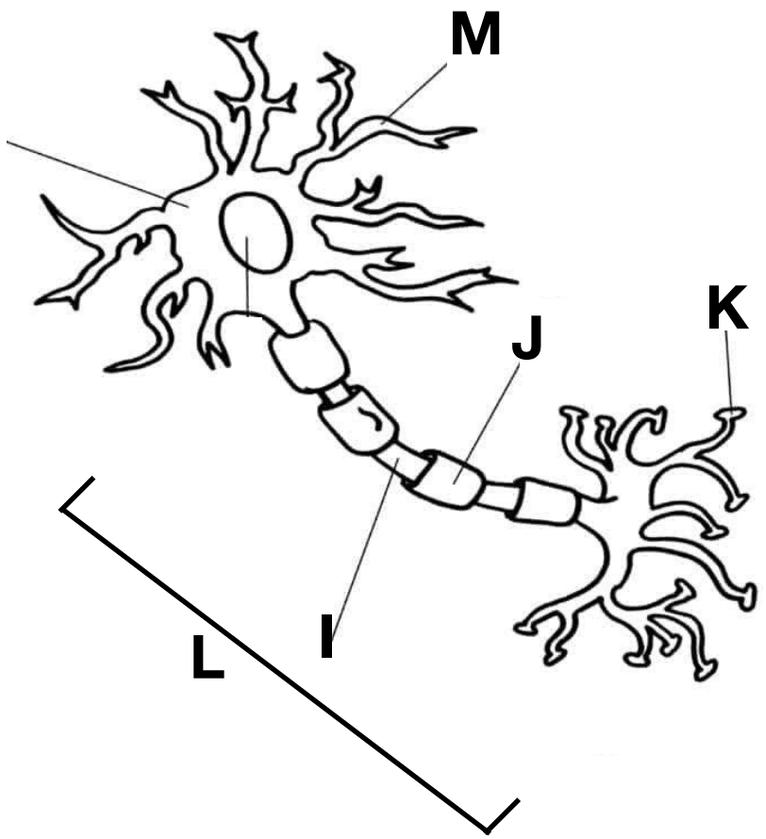
Synapse and Neurotransmitters



In your group identify the parts

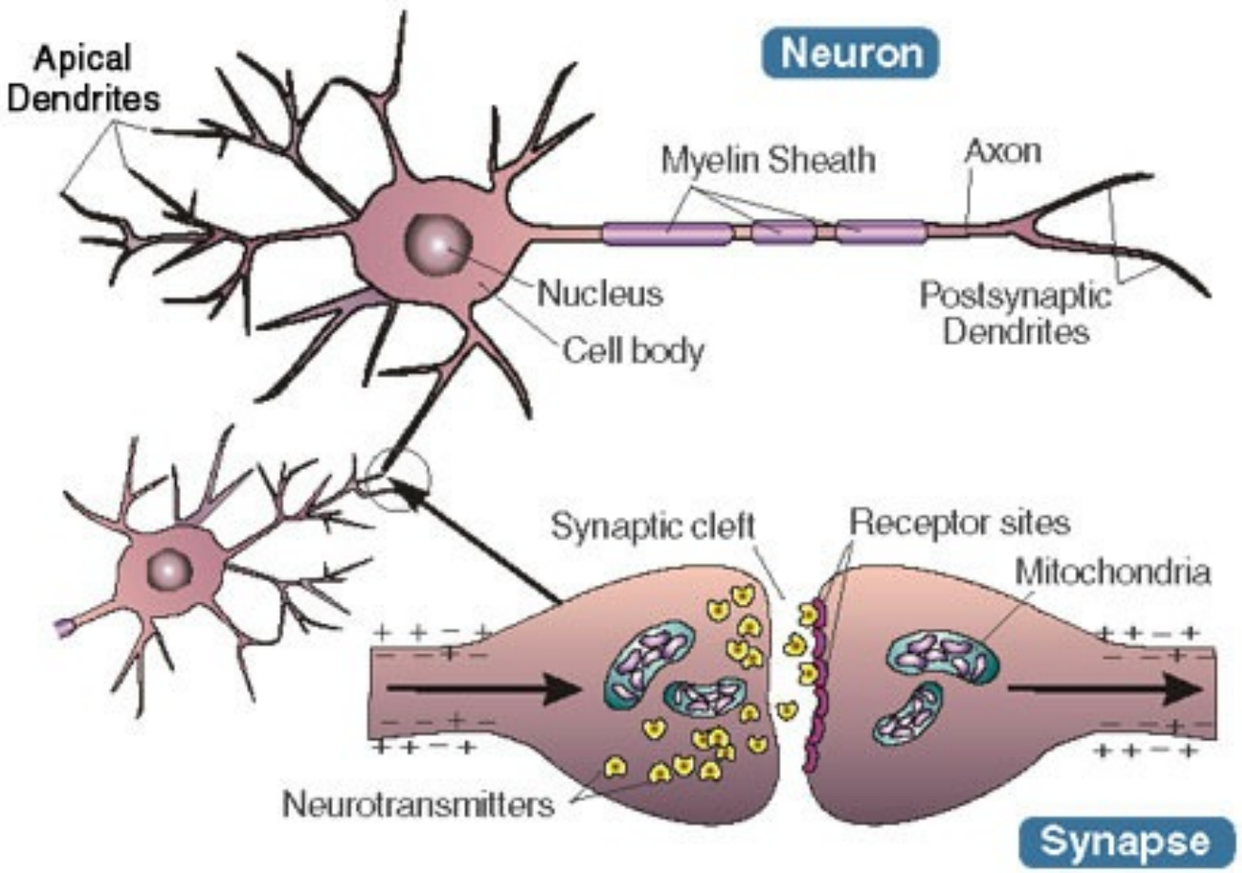




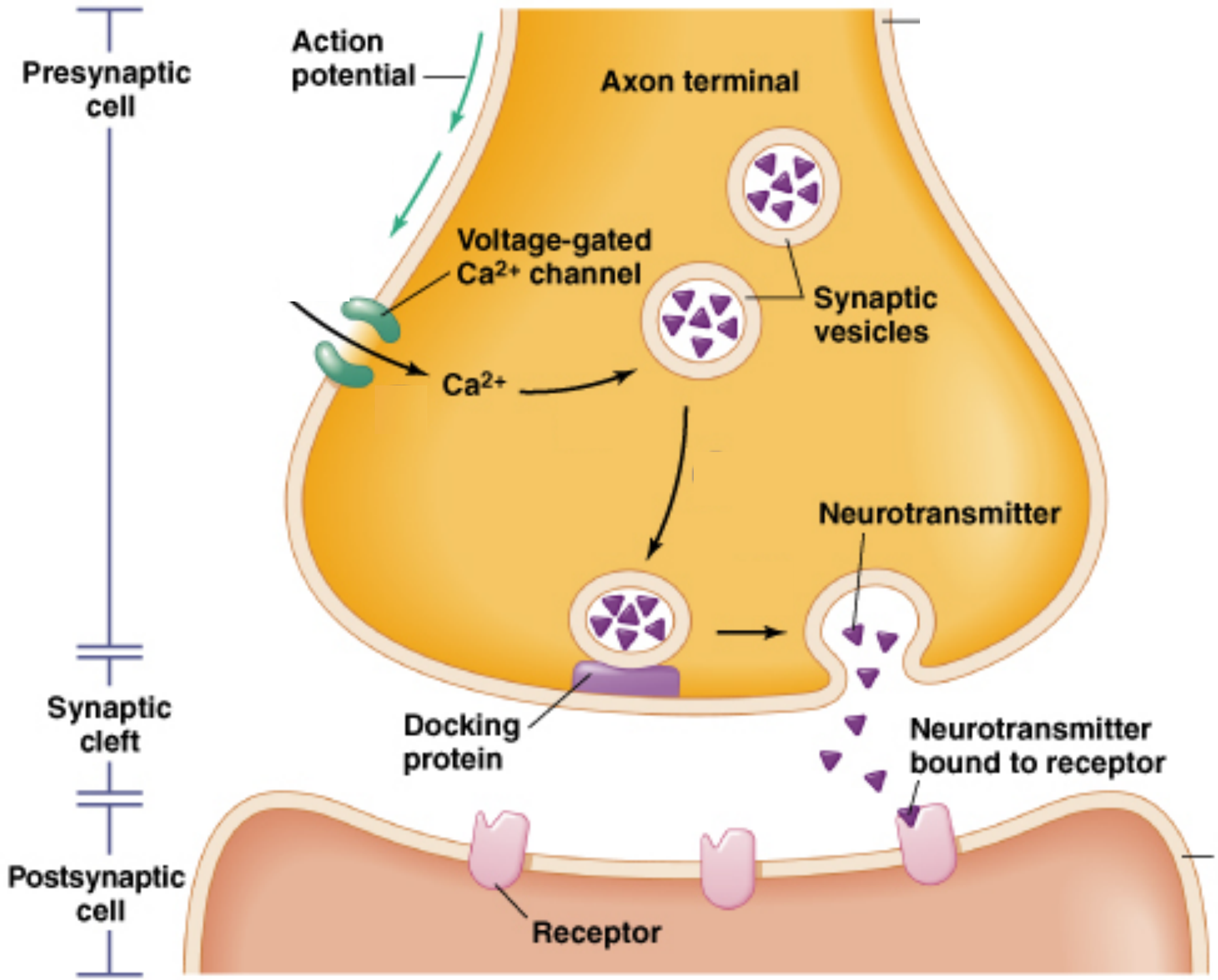


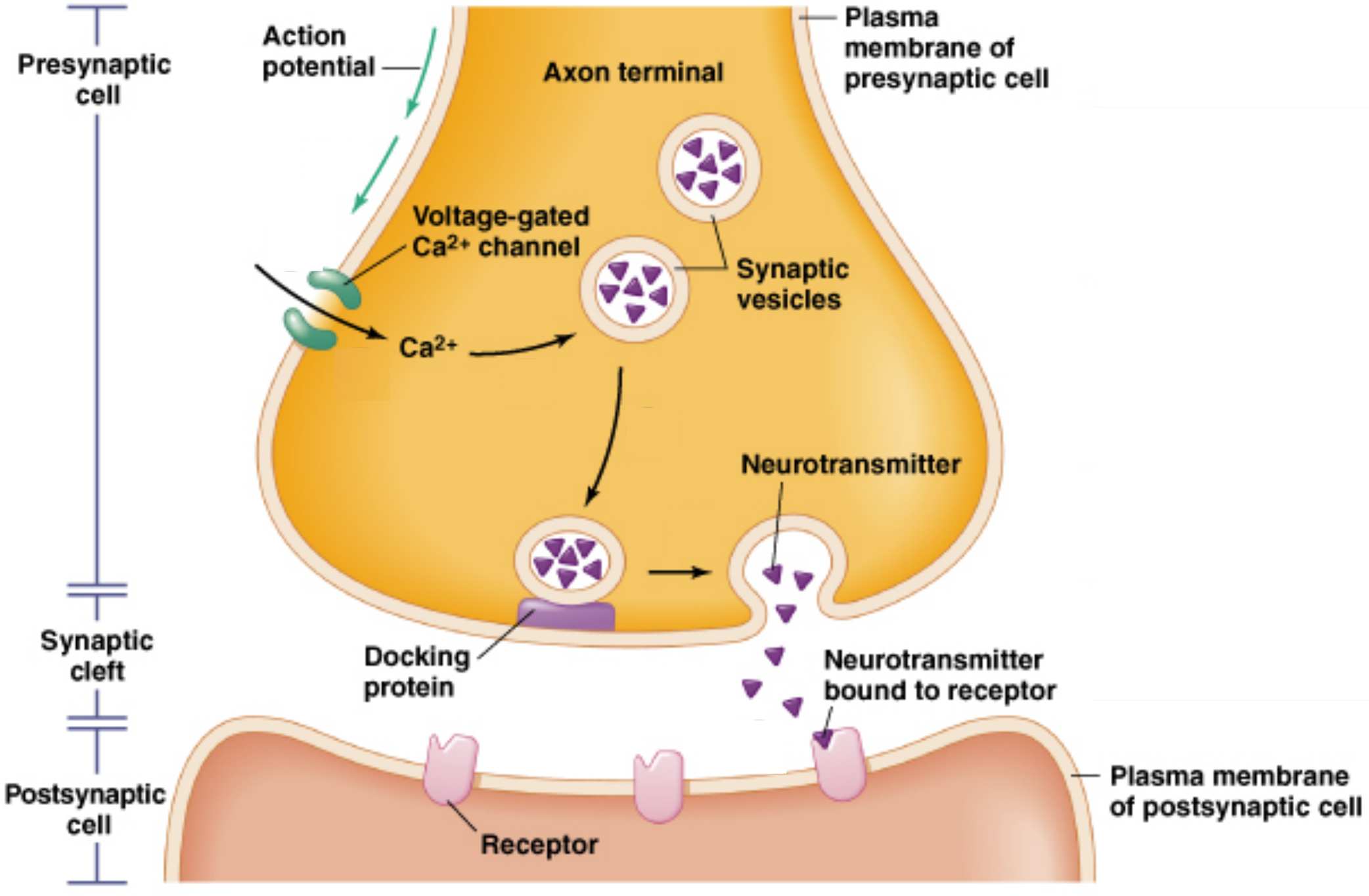
How do signals pass between neurons?

- Synapse = space between neurons
- In muscles—> between neurons and muscle fibres
- In Glands—> between neurons and secretory cells
- chemical neurotransmitters are used to transmit signal since the gap is fluid filled where electrical impulse can't pass



- Synapse structure



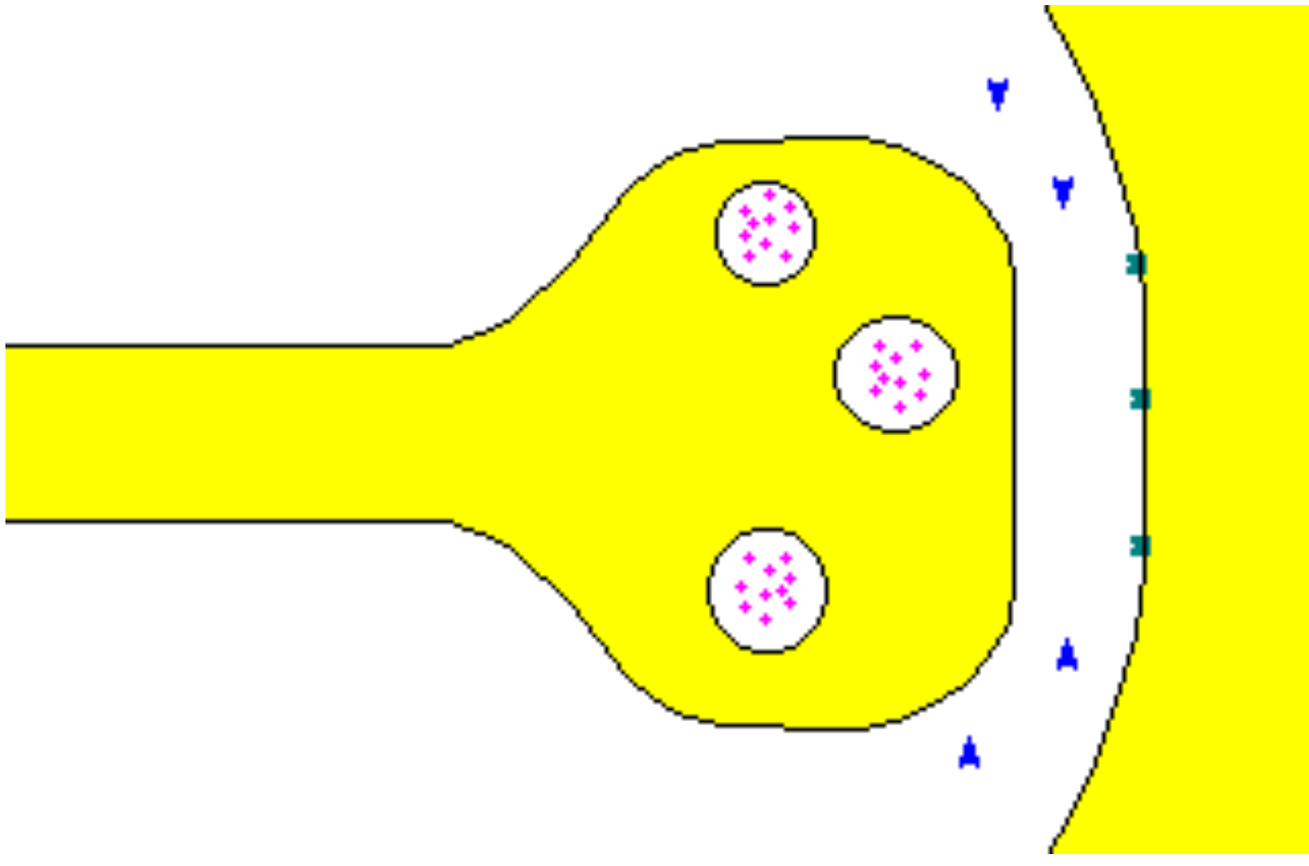


In your group…

- Work together to complete **data based question** on 325/26

Acetylcholine

- Used as the neurotransmitter in many synapses
- produced in the pre-synaptic neuron
- released into the cleft when an action potential reaches the terminus
- binds to a receptor in the post-synaptic neuron to generate another action potential
- quickly broken down by the enzyme ***acetylcholinesterase*** afterwards into choline and acetate
- these components are reabsorbed back to the pre-synaptic neuron



- Read about Neonicotinoid on page 326
- Make note it’s the node of action as a pesticide
- Note why it does not poison humans and other mammals

Research question into tomorrow.

What's the difference between protein based hormones and steroid based hormone?