**Synaptic transmission**

1. An action potential in the presynaptic neuron arrives at an axon terminal
2. The electrical message of an action potential is converted chemically into neurotransmitter molecules, which are enclosed in vesicles
3. The action potential causes voltage gated calcium channel to open
4. Calcium ions diffuse from the extracellular fluid and into the neuron
5. Calcium ions cause the vesicles which contain neurotransmitters to migrate to the cell membrane
6. The vesicles fuse with the membrane and release the neurotransmitters into the synapse via exocytosis
7. The neurotransmitters diffuse across the synapse to receptors on the post-synaptic neuron/dendrite
8. Which triggers depolarisation of the adjacent membrane/successive action potentials are generated