1. A wave of **action potential** travels along the **presynaptic neuron**, until it reaches the **synaptic end bulb**.
2. **Depolarisation** of the membrane at the synaptic end bulb causes the **Ca2+ channels to open**.
3. **Ca2+ ions** flow **into** the presynaptic membrane.
4. **Increase in Ca2+** inside the cell **activates vesicles** containing the neurotransmitter.
5. Vesicles **fuse with membrane**, **releasing neurotransmitter** (via exocytosis) into **synaptic cleft**.
6. Neurotransmitter **diffuses** across the synaptic cleft and **binds to a neurotransmitter receptor molecule (specific to neurotransmitter)** on the **postsynaptic** neuron.
7. Binding of neurotransmitter causes the receptor molecule to be **activated**. This **causes an action potential in the postsynaptic neuron or stimulus for an effector (muscle or gland).**
8. Neurotransmitter molecules eventually **break loose** from receptor molecule and **drift away** (through synaptic cleft towards the presynaptic neuron).
9. The neurotransmitter is **deactivated by an enzyme** in the synaptic cleft and is **reabsorbed (endocytosis)** by the **presynaptic neuron to be reused**.

