Neurotransmitter release script

Narration:

When action potentials reach the axon terminal, the associated voltage fluctuation opens voltage-sensitive calcium channels in the terminal membrane. When the channels are open calcium ions flow into the axon terminal. These ions are needed to make the neurotransmitter vesicles migrate toward the membrane of the axon terminal. Because they are made of the same material as the membrane, the vesicles can then fuse with the axon terminal membrane. When the vesicles fuse, they open and release their neurotransmitter contents into the synaptic cleft that lies between the axon terminal and a dendritic spine of a neighboring neuron. These neurotransmitter molecules are now available to bind to receptors on the dendritic spine, influencing the activity state of the neighboring neuron.

Attached: a scan of an illustration of a synapse, along with a “story board” for the desired accompanying motion graphics.

Here are links to a couple of *good* animations but these are not that great (hence the need for better ones!):

<https://www.youtube.com/watch?v=xF2UFV6EKt0>

<https://www.youtube.com/watch?v=zx46xADMIBY>