**Mouse Party**

The simplified mechanisms of drug action presented in this activity are just a small part of the story. When drugs enter the body they elicit very complex effects in many different regions o

f the brain. Often they interact with many different types of neurotransmitters and may bind with a variety of receptors. For example, THC in marijuana can bind with cannabinoid receptors located on the presynaptic and/or postsynaptic cell in a synapse.
Where applicable, this activity primarily depicts how drugs interact with dopamine neurotransmitters because this website focuses on the brain's reward pathway. Mouse Party is designed to provide a small glimpse into the chemical

interactions at the synaptic level that cause the drug user to feel 'high'.

**Diagram of a Synapse:**



**5.** Fill in the chart below based upon the information presented in the Mouse Party animation

|  |  |  |
| --- | --- | --- |
| **Drug** | **Neutransmitter(s) Involved** (*Inhibitory or Excitatory*) | **Action of Drug** |
| http://www.godandscience.org/images/thc.gif**Marijuana** |   |   |
| Full structural formula of ethanol**Alcohol** |   |   |
| http://www.sigmaaldrich.com/content/dam/sigma-aldrich/structure8/195/mfcd00056906.eps/_jcr_content/renditions/mfcd00056906-medium.png**Cocaine** |   |   |
| https://farm8.staticflickr.com/7378/9736304951_3cf43c9f55_o.png**Heroin** |   |   |