



# Psychology

## Lesson #15, April 10

Learning Target: Students will understand the process of neurotransmission.

# Warm Up

Neurotransmission is when a neuron passes a message to another neuron by releasing chemicals to the next neuron at the synapse.

**What are some real life examples of that?**

Think of what you do in your daily life and how that is very similar to neurotransmission. Create a list of 5-7 examples of neurotransmission.



# Warm Up

Neurotransmission is when a neuron passes a message to another neuron by releasing chemicals to the next neuron at the synapse.

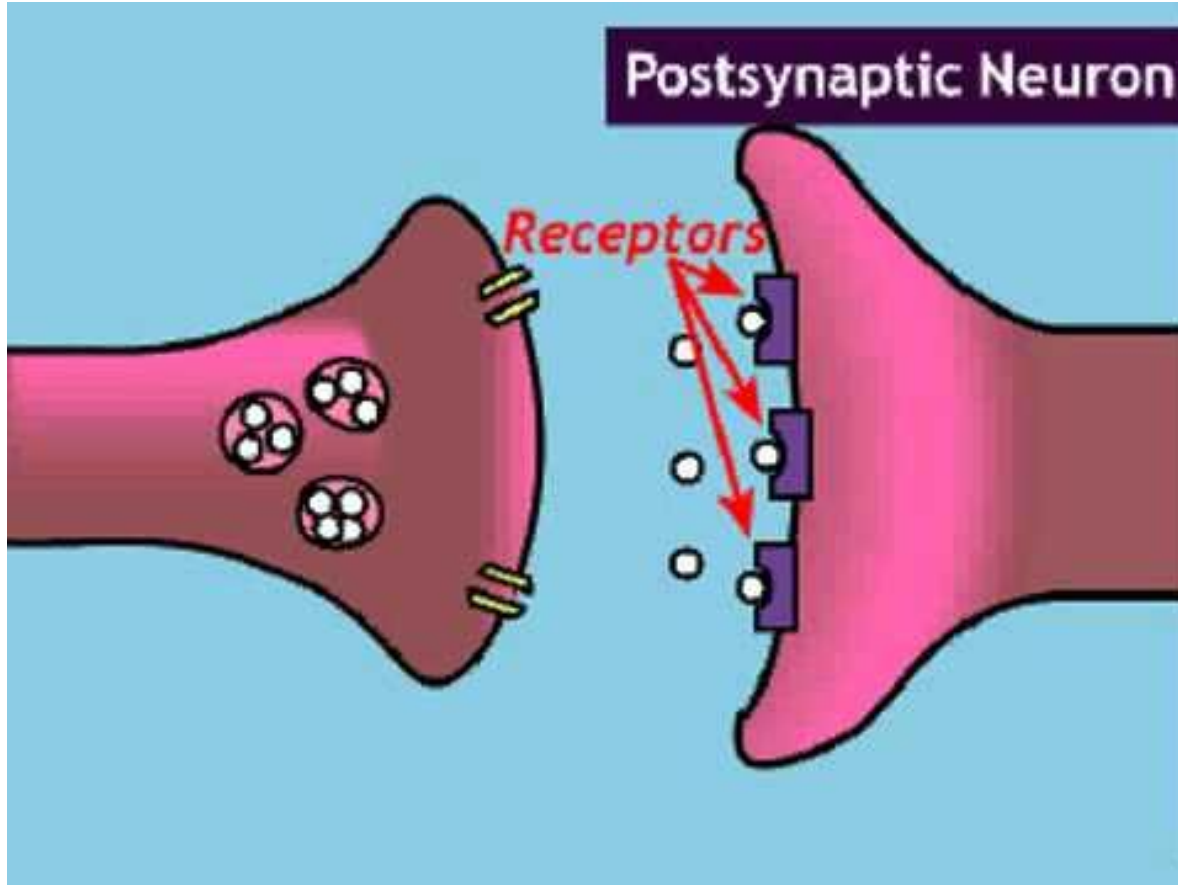
**What are some real life examples of that?**

Think of what you do in your daily life and how that is very similar to neurotransmission. Create a list of 5-7 examples of neurotransmission.

**Teacher-Modeled Thinking:**

**Examples could include sending a text, how it uses satellites to decode a message, going to a website, turning on the TV, etc.**

# Lesson Activity



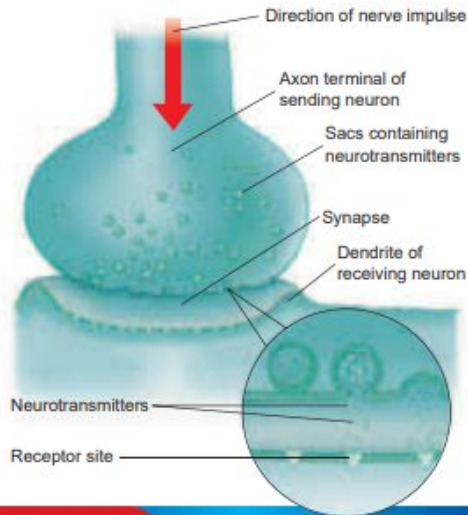
Watch this video to introduce the role of Neurotransmitters before diving in to more learning!

# Lesson Activity

**The Neuron Connection** If you look closely at Figure 6.2, you can see that there is a space between the axon terminals of one neuron and the dendrites of another neuron. This space between neurons is called the **synapse**. The synapse is a junction or connection between the neurons (see Figure 6.3). A neuron transmits its impulses or message to another neuron across the

**synapse:** the gap that exists between individual nerve cells

Chapter 6 / Body and Behavior 157



synapse by releasing chemicals called **neurotransmitters**. These neurotransmitters open chemical locks or excite the receptors. The neurotransmitters can excite the next neuron or stop it from transmitting (inhibition). The neurotransmitters are like the valves in a water system that allow flow in only one direction. There are many different neurotransmitters; for example, *norepinephrine* is involved with memory and learning, and *endorphin* inhibits pain. The oversupply or undersupply of certain neurotransmitters has been linked to certain diseases. For instance, an undersupply of *acetylcholine*, a neurotransmitter involved in movement and memory, is associated with paralysis and Alzheimer's disease. An oversupply of *dopamine*, involved in learning, emotional arousal, and movement, is linked to schizophrenia, while an undersupply is linked to Parkinson's disease. An undersupply of norepinephrine and *serotonin* may result in depression.

Use the image to help in filling out the chart on different neurotransmitters

[Neurotransmitters](#)

# Lesson Activity(Key)

Click here for -> [answer](#)  
[key](#)

# Practice

Use the link to play a game to review your learning.

[Neurotransmitter](#) Game



# Reflection/Extra Practice

Based on what you know of neurons and neurotransmission, you can practice filling out this chart:

[Neurons and Toilets](#)

[Synapses](#)