

Name: _____ Date: _____

Investigation Worksheet #1 for **The Basics: “The neuron – its parts & how it works”** (page 1 of 2)

Directions: Find, gather and record the requested information from assigned websites as listed on “WebQuest: Neurotransmitters, Cravings & Addiction”

1.) What is a neuron?	_____ _____ _____
2.) <u>Draw and label:</u> a neuron and its parts. <u>Include:</u> the dendrites, the cell body (soma), the nucleus, the axon and the pre-synaptic terminal. THE NEURON	
3.) Describe how the neuron works. List the process in steps. Number each step. Think about how the “message” is sent through the neuron... from the dendrites through the cell body to the axon and then to the next neuron. Attach a drawing of the process. Use arrows to illustrate the process.	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
4.) What is a synapse?	_____ _____ _____

5.) Draw and label: the synapse between two neurons.

Include: Pre-synaptic Neuron: the Axon Terminal & the Vesicles filled with Neurotransmitters

Post-synaptic Neuron: the Dendrite with Receptors. Also: the Cleft.

THE SYNAPSE

6.) What is neurotransmission?

7.) Describe what happens during neurotransmission.

List the process in steps. Number each step. Continue onto line paper, if needed, and attach to this page.

Attach a drawing of the process. Use arrows to illustrate the process.

8.) Name six small molecule neurotransmitter substances

1.) _____ 4.) _____

2.) _____ 5.) _____

3.) _____ 6.) _____

8.) Draw and label: two neurons that are passing the "message" along.

Use arrows to show the direction of the "message" as it is carried along from the pre-synaptic neuron through the synapse to the post-synaptic neuron. Use lightning bolts to illustrate the "message".

PASSING THE "MESSAGE" ALONG