***NERVOUS SYSTEM***

Answer the following questions. Use your book or Bozeman Science Video below to answer the following questions.

<http://www.bozemanscience.com/nervous-system>

1. What is a signal transduction pathway?
2. Draw and identify the parts of a typical neuron.
3. Explain how the structure of a neuron relates to the detection, generation, transmission and integration of signal information.
4. Identify the role of Schwann cells in relation to signal propagation.
5. Discuss how membranes of neurons are polarized.
6. Explain how membrane potential is maintained.
7. Explain how transmission of neurotransmitters across synapses occurs, and the effects of each of the following neurotransmitters:
   1. Acetylcholine
   2. Epinephrine
   3. Norepinephrine
   4. Dopamine
   5. Serotonin
   6. GABA
8. Explain how a response can be stimulatory or inhibitory.

**THESE QUESTIONS SHOULD BE ANSWERED ON ANOTHER SHEET OF PAPER. NO CREDIT IF THE ANSWERS ARE TYPED – THEY MUST BE HAND WRITTEN.**