

Chapter 3: The Biological Bases of Behavior

1. Discuss the evidence for interaction of heredity and environment. Explain the diathesis-stress model of psychopathology using examples.
2. Name the basic unit of the nervous system, state what it specifically does, and list and describe its three main parts.
3. Explain how a nerve impulse (action potential) occurs and how it is an all-or-nothing event. Indicate how nerve impulses are carried from one neuron to another.
4. Years ago, I saw an episode of *Tales from the Crypt* in which the protagonist takes a fire poker and drives the point of it into her estranged husband's forehead, impaling him upon about 2.5 inches of steel. The evil husband died from this wound. My question to you: Is this a true depiction of what would really happen? Why or why not?
5. Name and differentiate between the two branches of the autonomic nervous system.
6. Describe four methods by which the brain is studied.
7. Describe the functions of each of the following: parietal lobes, occipital lobes, temporal lobes, frontal lobes, and associative areas.
8. Describe the differing functions or abilities of the two hemispheres of the cerebral cortex.
9. Describe how the brain is “split” and describe the resulting effects. Define the term *contralateral arrangement* and explain how this term is relevant for a person who has a stroke that affects one hemisphere.