1. An axon transmits messages _____ the cell body and a dendrite transmits messages _____ the cell body.
   A) away from; toward
   B) away from; away from
   C) toward; away from
   D) toward; toward

2. To excite or inhibit an action potential in a receiving neuron, a neurotransmitter must cross the
   A) axon.
   B) synaptic gap.
   C) myelin sheath.
   D) endocrine glands.

3. The release of _____ to muscle cell receptors triggers muscle contractions.
   A) ACh
   B) serotonin
   C) dopamine
   D) adrenaline

4. Depressed mood states are linked to _____ levels of serotonin and _____ levels of norepinephrine.
   A) low; low
   B) high; high
   C) low; high
   D) high; low

5. A drug molecule that increases the release of a neurotransmitter into the synaptic gap is a(n)
   A) glutamate.
   B) steroid.
   C) agonist.
   D) opiate.

6. The peripheral nervous system consists of
   A) interneurons.
   B) the spinal cord.
   C) endocrine glands.
   D) sensory and motor neurons.

1. After Lola began using a street drug to enhance her moods, she discovered that she needed larger and larger doses of the drug in order to feel the drug's effect. Use your understanding of the neurotransmission process to explain Lola's experience.

2. The ancient Greek physician Hippocrates believed that four basic body fluids (blood, black bile, yellow bile, and phlegm) influenced human behavior, emotions, and personality. Use your understanding of the body's rapid and slower chemical communication systems to support or refute the general logic of Hippocrates' theory.

3. Describe specific functions of our older brain structures, which reveal that our brains are responsible for much more than simply our capacity to think.

4. After suffering a head injury in an auto accident, Alyssa says that she remembers what her mother looks like, and she can accurately recall many of her mother's distinctive facial features. However, when she is shown pictures of her mother, Alyssa is unable to recognize who it is, even though she can see clearly. Use your understanding of the functioning brain to account for Alyssa's strange pattern of experience.

5. Describe how an understanding of both a normally functioning brain and a split brain enables us to better appreciate the fact that most information processing takes place outside of conscious awareness.

1. The ancient Greek philosopher Plato located the mind in the
   A) head.
   B) heart.
   C) stomach.
   D) thyroid gland.

2. Phrenology highlighted the presumed functions of
   A) specific brain regions.
   B) synaptic gaps.
   C) endorphins.
   D) the myelin sheath.

3. The person most likely to suggest that the shape of a person's skull indicates the extent to which that individual is argumentative and aggressive would be a
   A) neurologist.
   B) behavior geneticist.
   C) psychoanalyst.
   D) phrenologist.

4. Although phrenology incorrectly suggested that bumps on the skull revealed a person's character traits, phrenology did succeed in focusing attention on
   A) synaptic gaps.
   B) action potentials.
   C) the localization of function.
   D) endorphins.

5. A focus on the links between brain activity and behavior is most characteristic of psychologists who work from a _____ perspective.
   A) psychodynamic
   B) cognitive
   C) behavioral
   D) biological

6. Dr. Wolski conducts research on the potential relationship between neurotransmitter deficiencies and mood states. Dr. Wolski's research focus is most characteristic of
   A) phrenology.
   B) the biological perspective.
   C) psychoanalysis.
   D) social psychology.

1. A neuron is best described as a(n)
   A) ion.
   B) cell.
   C) sheath.
   D) molecule.

2. Drugs that block the reuptake of serotonin will thereby increase the concentration of serotonin molecules in the
   A) axon terminals.
   B) synaptic gaps.
   C) glial cells.
   D) endocrine glands.

3. Natural, opiate-like neurotransmitters linked to pain control are called
   A) ACh agonists.
   B) dendrites.
   C) morphine antagonists.
   D) endorphins.

4. Botox injections smooth facial wrinkles because botulin is a(n)
   A) ACh antagonist.
   B) dopamine antagonist.
   C) ACh agonist.
   D) dopamine agonist.

5. The vast majority of neurons in the body's information system are
   A) glial cells.
   B) interneurons.
   C) motor neurons.
   D) sensory neurons.

6. As needed, the sympathetic nervous system _____ blood sugar levels and _____ the pupils of the eyes.
   A) lowers; dilates
   B) raises; contracts
   C) lowers; contracts
   D) raises; dilates