Nerve Impulse Stimulation

Complete the following statements:

1. ________________ ions tend to pass through cell membranes more easily than sodium ions.

2. When a nerve cell is at rest, there is a relatively greater concentration of ________________ ions outside of its membrane.

3. When sodium ions are actively transported outward through a nerve cell membrane, ________________ ions are transported inward.

4. The difference in electrical charge between the inside and the outside of a nerve cell membrane is called the ________________.

5. If the resting potential becomes less negative in response to stimulation, the cell membrane is said to be ________________.

6. As a result of an additive phenomenon called ________________, the threshold potential of a membrane may be reached.

7. Following depolarization, potassium ions diffuse outward and cause the cell membrane to become ________________.

8. An action potential is a rapid sequence of changes involving depolarization and ________________.

9. The moment following the passage of an action potential during which a threshold stimulus will not trigger another impulse is called the ________________.

10. Muscle fiber contraction and nerve impulse conduction are similar in that both are ________________ responses.

11. Myelin contains a high proportion of ________________.

12. Nodes of Ranvier occur between adjacent ________________.

13. The type of conduction in which an impulse seems to jump from node to node is called ________________.

14. The greater the diameter of a nerve fiber, the ________________ the impulse travels.