

[Hints: Read the Chapter thoroughly then answer the questions of this sheet]

**1. The diagram below is of a nerve cell or neuron. Add the following labels to the diagram: And Color in the diagram as suggested below.**

Axon Myelin sheath Cell body Dendrites Muscle fibers Axon terminals

Axon - purple

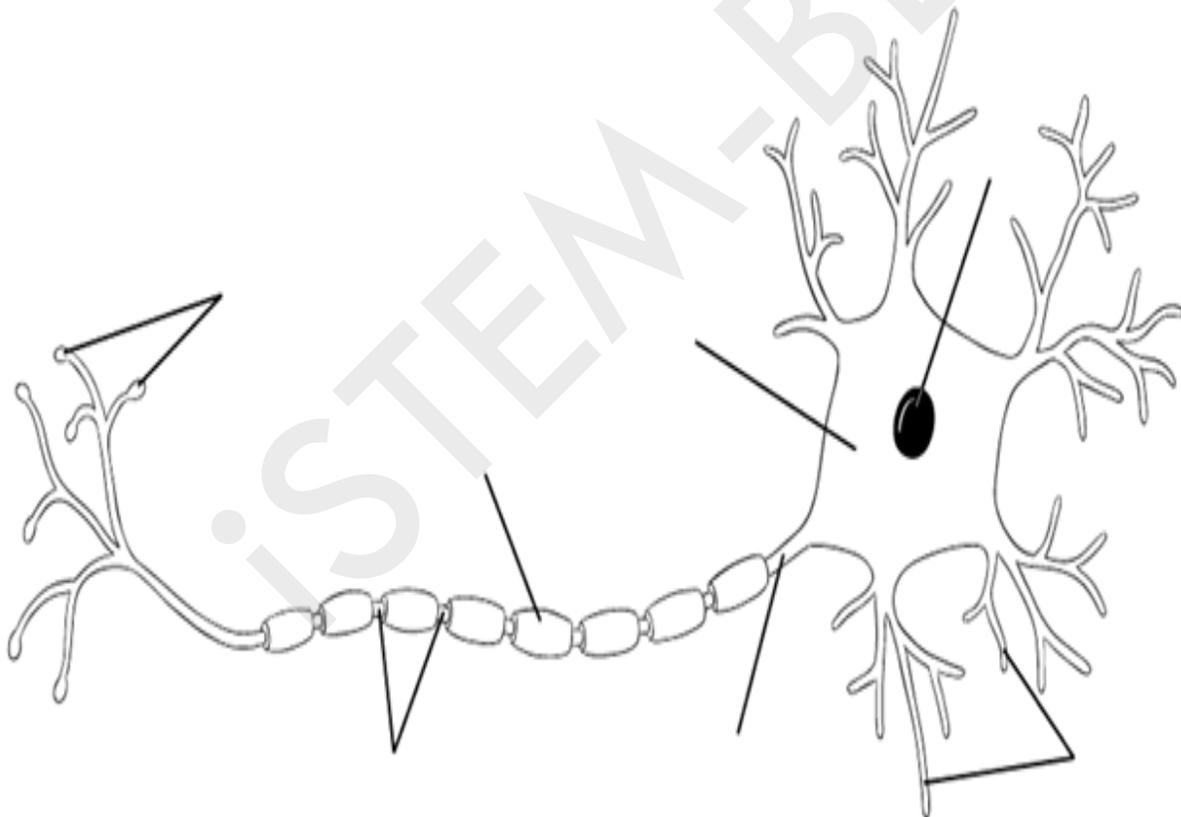
Axon Terminals – orange

Myelin sheath – yellow

Cell body – blue

Dendrites – green

Muscle fibers - red



**2. There are three different kinds of neurons or nerve cells. Match each kind with its function.**

Kind of neuron      Function

- a. .... The nerve cell that carries impulses from a sense receptor to the brain or spinal cord.
- b. .... The nerve cell that connects sensory and motor neurons
- c. .... The nerve cell that transmits impulses from the brain or spinal cord to a muscle or gland

**3. Match the descriptions in the table below with the terms in the list.**

A. Synapse    B. Axon    C. Myelin sheath    D. Nerve impulse    E. Sense receptor    F. Response; G. Reflex    H. Cell body    I. Dendrite    J. Nerve    K. Neurotransmitter    L. Axon terminal

- ..... 1. The long fiber that carries the nerve impulses.
- ..... 2. A bundle of axons.
- ..... 3. The connection between adjacent neurons.
- ..... 4. The chemical secreted into the gap between neurons at a synapse.
- ..... 5. A rapid automatic response to a stimulus.
- ..... 6. The covering of fatty material that speeds up the passage of nerve impulses.
- ..... 7. The structure at the end of an axon that produces neurotransmitters to transmit the nerve impulse across the synapse.
- ..... 8. The high speed signals that pass along the axons of nerve cells.
- ..... 9. The branching filaments that conduct nerve impulses towards the cell.
- ..... 10. The sense organ or cells that receive stimuli from within and outside the body.
- ..... 11. The reaction to a stimulus by a muscle or gland.
- ..... 12. The part of the nerve cell containing the nucleus.

