

## **Types of Cells In Nervous Tissue**

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1. Compare a neuron to neuroglial cells.
2. List the 5 types of neuroglial cells.
3. Function of ependymal cells.
4. Function of microglial cells.
5. 5 functions of astrocytes.
6. Function of Oligodendrocytes and Schwann Cells.
7. Compare Oligodendrocytes and Schwann Cells.
8. Purpose of myelin sheath.
9. Describe multiple sclerosis.

## **Answers:**

### **Types of Cells In Nervous Tissue**

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1. Compare a neuron to neuroglial cells.  
**Neurons fire action potentials. Neuroglial cells protect and nourish the neurons.**
2. List the 5 types of neuroglial cells.  
**Astrocytes, ependymal cells, oligodendrocytes, Schwann cells, microglia**
3. Location and function of ependymal cells.  
**These cells line the ventricles. Their cilia circulates CSF.**
4. Function of microglial cells.  
**These cells are WBCs that clean up debris and fight infection in nervous tissue.**
5. 5 important facts about astrocytes.
  - **Control chemical environment around neurons**
  - **Contribute to the blood/brain barrier (by blocking most things in the capillaries from entering brain tissue)**
  - **May be important in influencing the type and amount of neurotransmitters released by a neuron**
  - **May be important in the recycling of neurotransmitters**
  - **Play a role in the formation of CSF**
6. Function of Oligodendrocytes and Schwann Cells.  
**Wrap axons in myelin.**
7. Compare Oligodendrocytes and Schwann Cells.  
**Oligodendrocytes: CNS; Schwann Cells: PNS**
8. Purpose of myelin sheath.  
**Insulates and speeds up action potential propagation.**
9. Describe multiple sclerosis.  
**Autoimmune disease in which the person's own WBCs attack and destroy the myelin sheath. The disease usually begins by affecting nerves but eventually affects the CNS as well.**