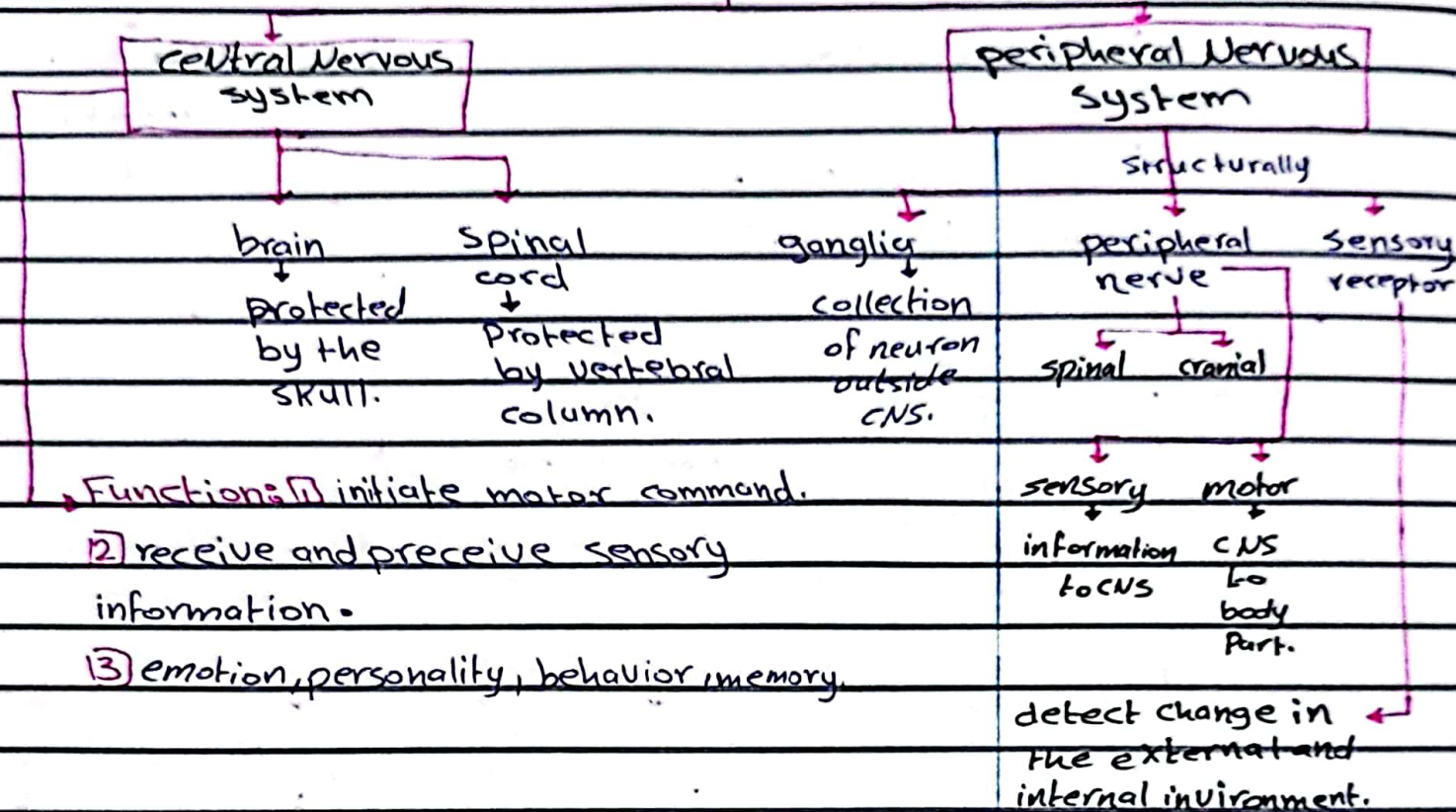


# Nervous system



very small amount of ECM

## Nervous tissue

Neuron (cannot divide)  
(Nerve cell)

- Functional unit of CNS.
- produce action potential.

cell body

nucleus  
+ prominent  
nucleolus

nissl  
bodies

Neurofilament  
give shape  
and support

cell processes

axon dendrite

Neuroglia  
(supporting)

PNS

CNS

Schwann  
cell

form myelin  
sheath

Satellite  
cell

support  
in dorsal root  
ganglia.

rough endoplasmic  
reticulum

Free  
ribosomes

Function: protein  
synthesis.

microglia  
cell

Defense  
(phagocytosis)

part of blood  
brain barrier.

Astrocyte

Ependymal  
cell

Line  
cavities

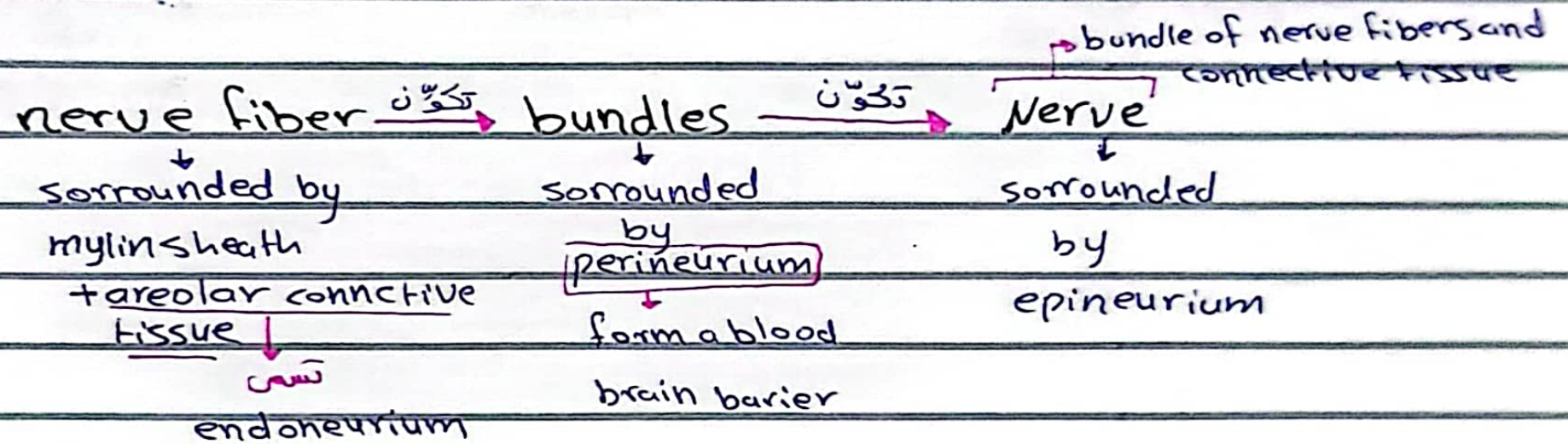
provide  
nutrient

oligodendrocyte

Form a myelin  
sheath.

Form scar  
tissue





skull

↓  
epidural space (between skull & duramater)

dura mater (contains venous sinuses) + outer layer

subdural space (between duramater & arachnoid)

Arachnoid (Thin middle layer)

subarachnoid space (beneath arachnoid) (large)

pia mater (covers the brain) (inner layer)

brain

control the passage of substances  
from blood to the nervous tissue

### blood brain barrier

endothelium  
of  
capillaries

pericytes  
↓  
around  
the  
capillaries

basal  
lamina

processes  
of  
astrocytes.