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Central Nervous System

Organization

- Helps maintain homeostasis in the body
 - Nervous system and endocrine system
 - Nervous system is faster due to nerve impulses



Organization of Nervous system

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Spinal Cord Functions

Conduction

Locomotion

• Reflexes

Spinal Cord Structure

- Regions: cervical, thoracic, lumbar and sacral
- 2 enlargements:
 - Cervical Enlargement
 - Lumbar Enlargement
- Cauda Equina
- Gives rise to 31 pairs of spinal nerves



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Spinal Nerve

- Mixed nerves
- Roots
- 31 pairs of spinal nerves







Brain

- Meninges
- Ventricles





(a) Lateral view

(b) Anterior view



Rostral (anterior) udinal I lobe natter 0 matter Corpus cal (anterior pa I ventricle Caudate ni Septum ral lobe pellucidum /entricle Sulcus I sulcus - Gyrus - Thalamus I ventricle -Choroid ple Corpus cal (posterior r tal lobe-Longitudina fissure

Caudal (posterior)

Brain

Regions

- Brain stem
- Cerebellum
- Diencephalon
- Cerebrum



(b)

Brain Stem

- Attaches to spinal cord
- Mid-brain
- Pons
- Medulla Oblongata



Diencephalon

- Thalamus
- Hypothalamus



Cerebrum

- Largest and most complex portion
- Landmarks:
 - Gyri
 - Sulci
 - Fissures
- Hemispheres
 - Corpus callosum



Cerebral Lobes

- Frontal:
- Parietal:
- Occipital:
- Temporal:
- Insula:

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