Nervous system

Ch 48

Functional MRI (Fig 48.1)

Neuron: name given to nerve cell

 Body:

Nucleus:

 Dendrite:

 Axon

Organization of nervous systems

 (Fig 48.2) cnidarian

 Nerve nets:

 (Fig 48.2) echinoderm

 Nerve:

 (Fig 48.2) flatworm

 Cephalization:

 Nerve cord:

 CNS (central nervous system):

 (Fig 48.2) annelid & arthropod

 Ventral cord:

 Ganglia:

 Peripheral nervous system:

 (Fig 48.2) life style differences

 (Fig 48.2) chordate (vertebrate)

 Spinal cord:

 Sensory ganglion:

Information processing

 Sensory input:

 External:

 Internal:

 Sensory neuron:

 Integration:

 Interneurons:

 Motor output:

 Motor neurons:

 Effector cell:

Reflex

Vertebrate neuron

 Dendrite:

 Axon:

 Axon hillock:

 Synapse:

 Synaptic terminal:

 Neurotransmitter:

 Presynaptic cell:

 Postsynaptic cell:

Myelinated nerve cell

 Schwann cell:

 Myelin:

 Myelin sheath:

 Node of Ranvier:

Central nervous system

 Brain:

 Spinal cord:

Peripheral nervous system

 Cranial nerves:

 Ganglia:

 Spinal nerves:

 Somatic nervous system:

 Autonomic nervous

 Sympathetic division:

 Parasympathetic division:

 Enteric division:

Brain development

 Forebrain

 Midbrain

 Hindbrain

 Telencephalon

 Diencephalon

 Mesencephalon

 Metencephalon

 Mylencephalon

Brain stem

 Medulla oblongata

 Pons:

 Midbrain:

Cerebellum:

Diencephalon:

 Epithalamus:

 Thalamus:

 Hypothalamus:

Cerebrum:

 Cerebral hemispheres:

 Basal nuclei:

 Neocortex:

 Corpus callosum:

Cerebral cortex

 Frontal lobe:

 Parietal lobe:

 Temporal lobe:

 Occipital lobe: