The meningeal branch of a spinal nerve actually reenters the vertebral canal to innervate the meninges and blood vessels. True

In the somatosensory system there are no third-order neurons in the cerebellum. True

There are 41 pairs of spinal nerves. False

The glossopharyngeal nerve is the only cranial nerve that contains sensory fibers. False

The musculocutaneous nerve is a major nerve of the brachial plexus. True

The second cranial nerve forms a chiasma at the base of the brain for partial crossover of neural fibers. True

The only cranial nerves to extend beyond the head and neck region are the vagus nerves. True

The dorsal ramus consists only of motor fibers bringing information to the spinal cord. False

Dermatomes are skin segments that relate to sensory innervation regions of the spinal nerves. True

Dorsal and ventral rami are similar in that they both contain sensory and motor fibers. True

Which of the following is an incorrect statement regarding the occurrence of a sensation?

a. The stimulus energy must be converted into the energy of a graded potential called a transduction potential.

A fracture of the ethmoid bone could result in damage to which cranial nerve?  
b. olfactory

### Striking the "funny bone" (ulnar nerve) may cause injury to a nerve of this plexus. a. brachial plexus

### Select the correct definition. b. Pattern recognition allows us to see a familiar face.

### The patellar "knee jerk" reflex is an example of a/an \_\_\_\_\_\_\_\_\_. c. stretch reflex

### Which of the following is not an example of an exteroceptor? Choose one answer. e. baroreceptor

### Transduction refers to conversion of \_\_\_\_\_\_\_\_\_\_\_. a. stimulus information to nerve impulses

### Damage to this nerve would cause dizziness, nausea, and loss of balance.

### Vestibulocochlear

### Nerve involved in the regulation of breathing

Vagus

### Damage to this nerve would cause dificulty in speech

Hypoglossal

### Damage to this nerve would keep the eye from rotating counterclockwise interolaterally.

Trochlear

### Reflex that checks the integrity of the spinal cord and dorsal rami at the level of T8 to T 12.

abdominal

### Which of the following is at the lowest level of the CNS? D)CPG

### The posterior side of the thigh, leg, and foot is served by the \_\_\_\_\_\_\_\_ nerve. tibial

### The cranial nerve with a dual origin (brain and spinal cord) is the \_\_\_\_\_\_\_\_. accessory

### Basic reflexes \_\_\_\_\_\_\_\_. may be modified by learned behavior

### Which of the following is not true about the integration center of a reflex arc? There are always multiple synapses with chains of interneurons.

### Meissnerʹs corpuscles \_\_\_\_\_\_\_\_. are anatomically unencapsulated

### Which receptors adapt most slowly? nociceptors

### Regeneration within the CNS \_\_\_\_\_\_\_\_. is complicated by secondary demyelination

### All processing at the circuit level going up to the perceptual level must synapse in the \_\_\_\_\_\_\_\_. thalamus

### The sciatic nerve is a combination of which two nerves? common fibular and tibial

### Irritation of a major nerve of this plexus may cause hiccups. cervical plexus

### Bellʹs palsy \_\_\_\_\_\_\_\_. is characterized by paralysis of facial muscles

### Babinskiʹs sign is \_\_\_\_\_\_\_\_. when the great toe dorsiflexes and the other toes fan laterally

### Mixed cranial nerves containing both motor and sensory fibers include all except which of the following? vestibulocochlear

### \_\_\_\_\_\_\_\_ always takes a nonspecific ascending pathway. Touch

### The cranial nerves that have neural connections with the tongue include all except the \_\_\_\_\_\_\_\_. trochlear

### Which nerve does not use the jugular foramen as a route of exit from the skull? trigeminal

### Feeling a gentle caress on your arm would likely involve all of the following except \_\_\_\_\_\_\_\_. Pacinian corpuscles

### \_\_\_\_\_\_\_ are modified free-nerve endings found in the stratum germinativum.

Merkel discs

### Complex motor behavior such as walking depends on \_\_\_\_\_\_\_\_ patterns.

fixed-action

### Pain perception is involved in the \_\_\_\_\_\_\_\_ ascending pathways of the somatosensory system.

nonspecific

### \_\_\_\_\_\_\_\_ is the tingling sensation or numbness when blood has been cut off from an area, as when the foot ʺgoes to sleep.ʺ

Ischemia