

Neuroscience

- 1 Which one of the following is **not** part of a reflex to the stimulus of placing your hand on a hot object?
- A Sensory neuron transmits electrical impulse to the central nervous system.
 - B Muscle cells contract.
 - C Motor neuron transmits electrical impulse to muscle cells.
 - D Relay neurons pass electrical impulse from sensory to motor neurons.
 - E Brain transmits electrical impulse to relay neuron.

2015

- 9 In a reflex action in which a person touches a hot plate and pulls their arm away, neurons of different lengths are involved. Which answer identifies the relative lengths of the neurons?

	Length of neuron		
	Longest	Medium	Shortest
A	sensory	relay	motor
B	motor	sensory	relay
C	relay	motor	sensory
D	motor	relay	sensory
E	relay	sensory	motor
F	sensory	motor	relay

2013

- 9 In one type of neurological disease, neurons are unable to detect a certain stimulus which would normally cause pain. In a patient with this disease, which of the following would be true?
- 1 The patient would not show a reflex action to the stimulus.
 - 2 The patient would be able to take appropriate action if they could also see the application of the stimulus.
 - 3 The patient would be able to sense pain but would not be able to respond to it.
 - 4 The patient would be able to sense pain but would not be able to communicate this to the brain.
- A 1 and 2 only
 - B 1 and 3 only
 - C 1 and 4 only
 - D all of the statements

2012

Neuroscience

- 13** Signals are transmitted from one neuron to the next neuron, by molecules. These statements are about this process:
- 1** Transmitter molecules are formed in the receptors.
 - 2** The signal is transmitted across the synapse by osmosis.
 - 3** Transmitter molecules are released once the signal has been transmitted across the synapse.
 - 4** The release of transmitter molecules is triggered by an impulse.
 - 5** The signal is transmitted across the synapse by diffusion.

Which of the above statements are correct?

- A** 1 and 2
- B** 1 and 3
- C** 1 and 5
- D** 2 and 4
- E** 3 and 4
- F** 4 and 5

2010