

CHAPTER 14 COORDINATION AND RESPONSE

CHAPTER 14.1 Nervous control in humans

1. Fig. 1.1 shows a reflex arc involving a finger and a muscle in arm. After touching the sharp pin, the arm produces a response.

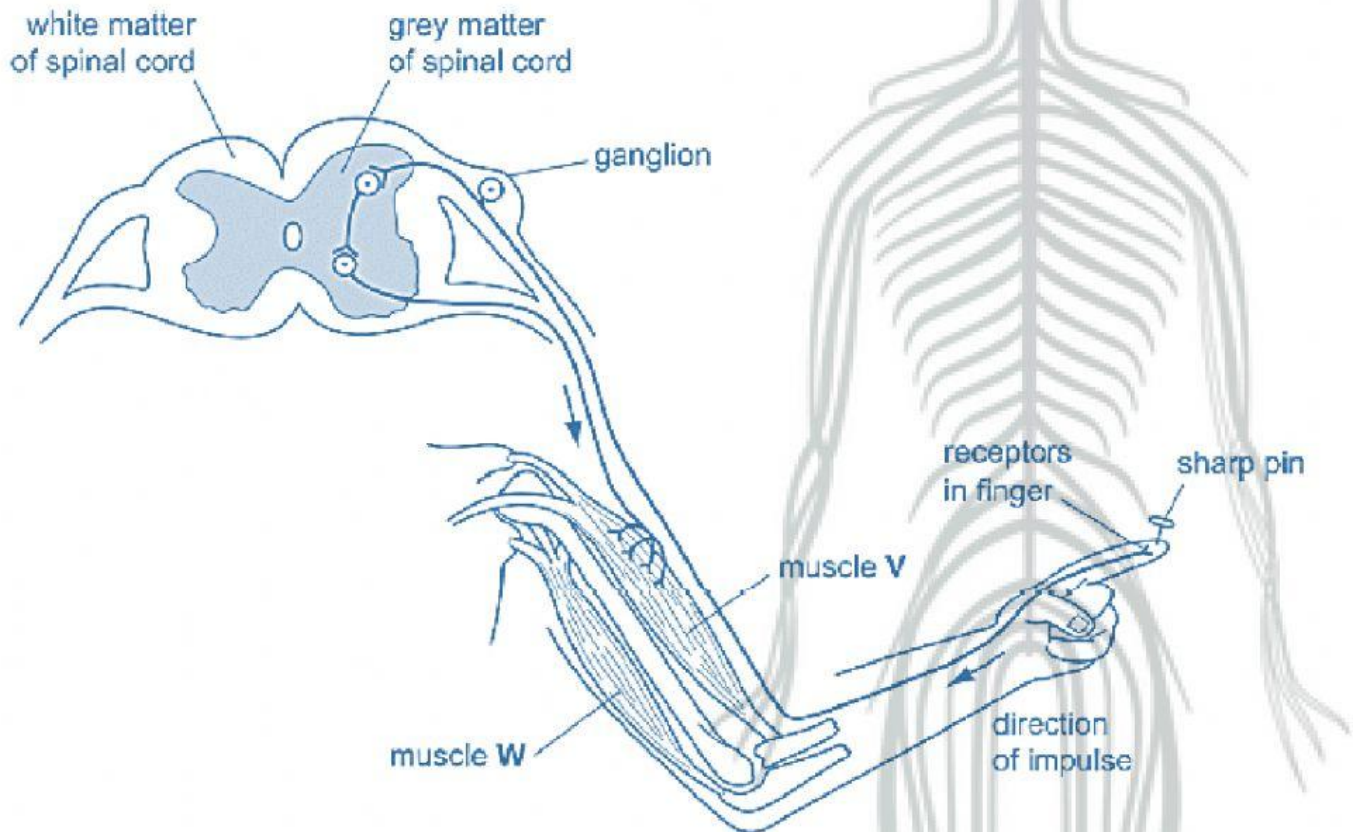


Fig. 1.1

- (a) Reflex arc is how impulse transmission is sent over, using the nervous system. To actually understand the nervous system, we need to make sure that we understand the component involved in the system.

Answer the following questions to test your understanding.

(i) Impulse can be defined as ...

- chemical signal that passes along nerve cells
- electrical signal that passes along nerve cells
- messages that contained neurotransmitter

(ii) Cells that responsible to transmit nerve impulses are ...

- sensory neuron
- spinal cord
- relay neuron
- motor neuron
- synapses

(iii) Impulses that is transmitted will be received at the central nervous system (CNS). The CNS are consisting of ...

spinal cord	nerve cells
nerve cells	brain
peripheral	gland

(iv) The function of the CNS is to ...

stimulating the impulse
transmit the impulse
integrate the impulses

(v) In Fig. 1.1, the sharp pin will produce pain when is touched by the finger. The 'pain' is considered as

receptor	impulse
stimulus	effector

(vi) In Fig. 1.1, the pain received after the finger touch the sharp pin is detected by

effector	stimulus
receptor	neuron

Nervous System | Animation explained

Please watch the video.

