

Control in cells and in organisms: Response to Stimuli

Key words:

alleles, selection pressure, taxes, kineses, tropisms

Fill in the blanks to show your understanding of stimulus and response:

Stimulus → _____ → _____ → _____ → response

Sensory reception:

What are a stimulus and a response?

What is the advantage to organisms of being able to respond to stimuli?

What are taxes, kineses and tropisms?

How does each type of response increase in organism's chances of survival?

Write a definition for taxes:

Explain the difference between positive taxes and negative taxes:

Write a definition for kineses:

Explain the difference between:

- positive kineses:
- negative kineses:

Write a definition for tropism:

List the different types of tropism:

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Explain the difference between:

- positive tropism:
- negative tropism:

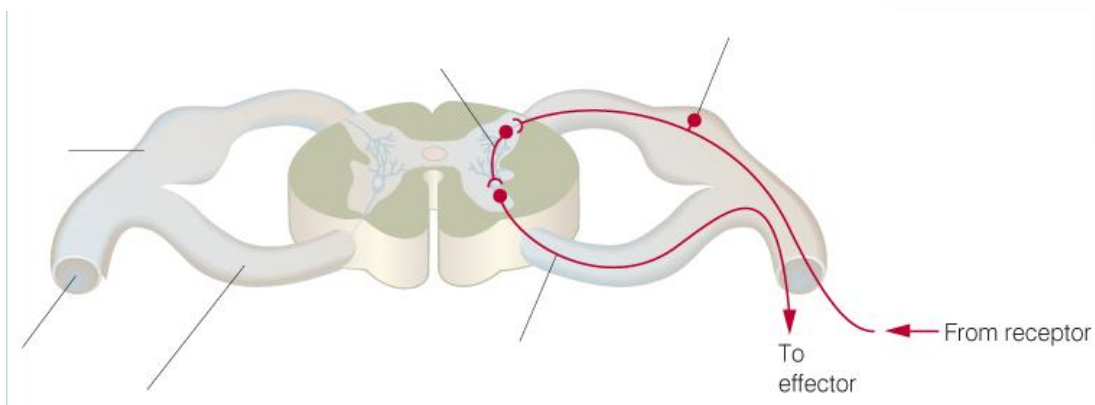
Nervous control:

- How does a simple reflex arc work?
- What roles do sensory, intermediate and motor neurone play in a reflex arc?
- How do reflex arcs prevent damage to the body?

Key words:

neurones, effector, synapse, motor, sensory, central nervous system, peripheral nervous system, voluntary, autonomic, spinal cord

Label the diagram to show how the nerves are arranged in the spinal cord:



Describe the reflex arc that occurs when you touch a hot object: