





# WHAT SHOULD YOU KNOW?

ANIMAL COORDINATION AND INTERACTION	<b>Stimuli</b>	<ul style="list-style-type: none"> <li>• All the information which a living being receives.</li> <li>• They provoke a response.</li> <li>• They are received through interaction.</li> </ul>	
	<b>Receptors</b>	<ul style="list-style-type: none"> <li>• Receptors are structures which detect external and internal stimuli.</li> <li>• In animals they are found in the sense organs.</li> <li>• In plants they are found in cells.</li> </ul>	
	<b>The nervous system</b>	<ul style="list-style-type: none"> <li>• The nervous system regulates and coordinates the body's activities and functions.</li> <li>• It consists of the central nervous system (brain and spinal cords) and the peripheral nervous system (nerves).</li> <li>• It produces responses which are sent to the responsive organs (effectors).</li> <li>• Nerves carry nerve impulses from the nerve centres to all other parts of the body.</li> <li>• Less-developed animals have a simpler nervous system.</li> </ul>	
	<b>Effectors</b>	<ul style="list-style-type: none"> <li>• Effectors are organs which produce a response. There are two types of responses to stimuli:               <ul style="list-style-type: none"> <li>– Motor: the response is movement. It is carried out by the motor system.</li> <li>– Endocrine: the response is the release of hormones. It is carried out by glands.</li> </ul> </li> </ul>	
PLANT COORDINATION AND INTERACTION	<p>There are two types of responses to external stimuli:</p> <ul style="list-style-type: none"> <li>• <b>Tropism:</b> This refers to permanent responses which produce changes in the direction of the plant's growth. There are several types of tropism:           <ul style="list-style-type: none"> <li>- <b>Geotropism.</b> The response is provoked by gravity.</li> <li>- <b>Phototropism.</b> The response is provoked by light.</li> <li>- <b>Hydrotropism.</b> The response is provoked by water.</li> <li>- <b>Thigmotropism.</b> The response is provoked by contact.</li> </ul> </li> <li>• <b>Nastic movements</b> are temporary responses of particular parts of the plant.</li> </ul>		