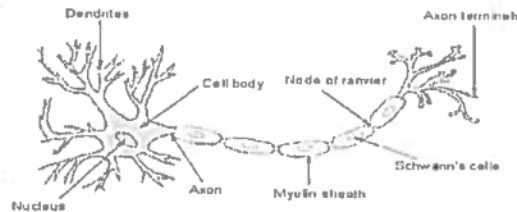


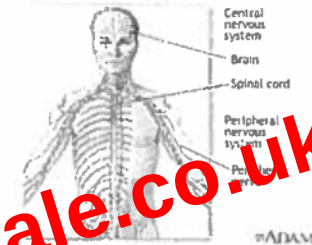
The Nervous System



- The brain controls almost everything that happens in your body
 - We can live without certain organs, but no one can live without a brain
- The brain is just part of the nervous system → the system that senses the environment and coordinates appropriate responses
- The nervous system is made up of the brain, spinal cord and peripheral nerves

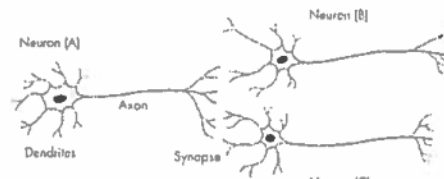
Structural Features

- The nervous system is made up two parts:
 - central nervous system
 - brain and spinal cord
 - peripheral nervous system
 - nerves that carry signals between the central nervous system and the body



Nerve Tissue

- nerves are made up of specialized cells called neurons
- their structure enables them to send information around your body
- they do this by conducting electrical signals – nerve impulses – from one area of the body to another



Sensory Receptors

- sensory receptors are specialized cells that receive input from our external environment and send signals to the brain
- in addition to the familiar senses, we have receptors in our muscles and skin that are sensitive to pressure, temperature and pain

Cool Facts About the Nervous System

- If we lined up all the neurons in our body it would be around 1000 km long
- The left side of human brain controls the right side of the body and the right side of the brain controls the left side of the body
- Neurons are the largest cells in the human body. (up to 1 m long)
- The Nervous System can transmit impulses as fast as 360 km/h