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| **Structure** | **Function** |
| Cerebral cortex | Higher order functions such as thinking, reasoning, memory, learning and conscious awareness of surroundings. Comprised of 4 lobes |
| Corpus callosum | Nerves fibres that allow communication between the 2 cerebral hemispheres |
| Cerebellum (below conscious level) | Coordination of fine contraction of voluntary muscle for smooth movements, balance and posture |
| Hypothalamus | Homeostasis; appetite, thirst, metabolism, body temperature, response to fear, water levels, sleeping |
| Medulla oblongata* Cardiac centre
* Respiratory centre
* Vasomotor centre
 | Regulates heart, breathing and diameter of blood vesselsRegulates rate and force of heartbeatRegulates rate and depth of breathingVasoconstriction and vasodilation of blood vessels |
| Spinal cord* Ascending tracts
* Descending tract
* Spinal reflexes
 | Made up of grey matter and surrounded by white matterSensory axons carrying impulses towards the brainBundles of motor axons carrying impulses from the brain to the musclesResponsible for reflexes by nerve cells in the spinal cord without input from the brain |