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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 vessels  Regulates rate and force of heartbeat  Regulates rate and depth of breathing  Vasoconstriction and vasodilation of blood vessels |
| Spinal cord   * Ascending tracts * Descending tract * Spinal reflexes | Made up of grey matter and surrounded by white matter  Sensory axons carrying impulses towards the brain  Bundles of motor axons carrying impulses from the brain to the muscles  Responsible for reflexes by nerve cells in the spinal cord without input from the brain |