

Understanding your brain.

Every animal has a brain, but the human brain is unique. It controls everything we do, think or feel and allows us to speak and imagine. It constantly analyses and responds to messages from outside and inside the body.

The three main parts of the brain-the brain stem, the cerebellum and the cerebrum-have evolved over millions of years. The brain stem is the most primitive part that we share with all animals. It links the rest of the brain to the spinal cord and controls involuntary body functions like breathing and digestion, as well as basic instincts like danger . It may be responsible for phobias, which scientists think are primitive survival instincts.

Next to evolve was the cerebellum at the back of the brain. It isn't very large, but it contains over half of all the brain cells, or neurones, and deals with huge amounts of information. It controls balance, movement and coordination and without it we couldn't stand or walk straight.

The largest and final part of the brain to develop was the cerebrum. This is the centre of thinking, memory and language, and it is highly specialized in humans. It is this part that makes us more intelligent than other animals. The cerebrum is divided into two hemispheres which each control opposite sides of the body and seem to



have slightly different functions. The right hemisphere helps us think about creative things like music, art and shapes, while the left side is better at maths, logic and language. Other smaller part of the brain also have important functions. The hypothalamus is essential for keeping our body temperature constant, while the amygdala below it controls our emotions.

The human brain is incredibly complex and scientists are only just starting to understand it . A lot more research is needed to complete the picture.