

Our Brain

Learning can be quite a strain, if we don't understand our brain

It's made in parts, one two and three, each making up what's you and me

The first, deep down is very old, been there since dinosaurs we're told

It's there to guarantee survival, breathing, hunting, flee from rivals

Only if we're safe and sound, will our thoughts shift to higher ground

The second, wrapped around the first, controls emotions, best and worst

Happy, sad, upset or calm, if too disturbed our learning's harmed

The third part runs our higher thoughts, it's where we process what we're taught

Cells link up, memories created, tricky problems negotiated

This bit's divided into two, strong left, strong right, which one are you?

The left likes words and smaller bites, the right – whole picture, patterns, sights

If all goes well both halves are used, the cells connect, no one's confused

And then while we are fast asleep, the memories are passed down deep

To sum up – this fantastic tool, will serve us well at home or school

To keep it at its best we oughta, give it exercise and rest and water (and healthy food!)

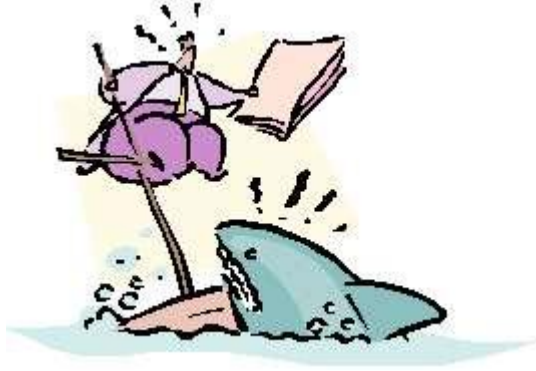
Three Brains in One The human brain is the result of millions of years of evolution. It consists of the reptile brain, the mammalian brain and the primate brain, also called:



The Reptilian Brain

The brain stem is the oldest part of our brain. We share it with birds, and reptiles. It controls the basics: hunger, temperature control, fight-or-flight fear responses, defending territory, keeping safe. It is often called the reptilian brain and is always on the alert for life-threatening events. We "downshift" when responding to life-threatening conditions. Because it is the "Flight or Fight" level of our brain, action takes place without thinking. Anything that is a threat - real or

imagined - causes our brain to "downshift." When "downshifting" occurs, learning



cannot take place.

The Limbic System

This is the home of the emotions. This part of the brain has visual memory, but language is limited to yells, screams, expletives. If we are not in an emotionally stable state we will not be able to learn efficiently as our brain "downshifts" from higher level activities. Any threat to our well-being can cause downshifting. A part of the limbic system, the hippocampus, is associated with long-term memory.



The Cerebral Cortex

This part of the brain is used for higher-level thinking. It processes thousands of bits of information per minute. It is the slowest of the three levels of the brain. Humans must be operating in this level if learning is to take place. Therefore the learning environment must be absent of threats, so that the brain doesn't "downshift" into its more primitive parts. This is the home of academic learning.