We have a brain like a sheep!

Most of the major structures and anatomy of our brains are the same as the brain of a sheep, elephant or a monkey! So what makes us different?

Even though our brains are similar, what makes us unique is that humans are born with a very *immature* brain. This means that our brains continue to grow after we are born, unlike nearly all other mammals, whose brains are fully formed by birth.

Here are the comparative sizes of a human brain to a chimpanzee's brain:

A baby chimpanzee's brain is about: 350 cm / squared An adult chimpanzee's brain is about: 450 cm / squared

A baby human's brain is the same size as a baby chimp's brain: 350 cm / squared But an adult human brain is about: 350 cm / squared

After birth, our brains grow 10 times more than a chimpanzee's, with the weight of our adult brain four times heavier than it is when we are born.

If you have ever wondered why babies have a soft bit in their skulls at the top of their heads, this is to enable their brains to continue to grow after birth.

(This soft *fontanel* is a good example of an evolutionary trade-off between the huge advantages of brain development and the small disadvantages of brain damage through this hole in the skull.)

Different parts of our brains mature at different rates, some parts still developing into early adulthood. This ability of the brain to adapt and develop while interacting with the external environment has so many advantages that it far outweighs the disadvantages of extended dependency on the parents. It takes us humans years to grow up, but a chimpanzee is already an adult when it is only nine months old.

Can you think of any examples of how our brain development is influenced by our environment? Think of things in your own childhood that have influenced you. Do you have any hobbies and interests that could have influenced your brain development?

To help, have a look at the following worksheets:

Why our brain automatically filters information Our automatic skills Automatic information processing