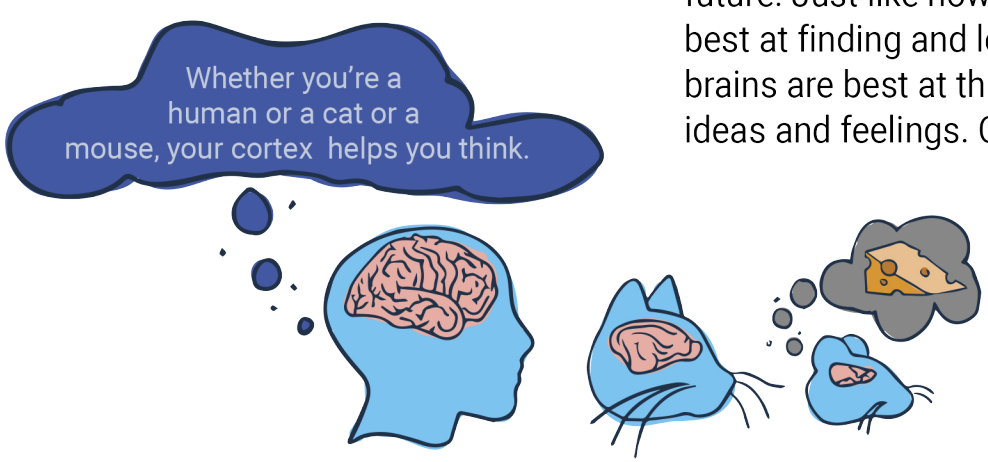
Human & Animal Brains: How Do They Compare?

By Elizabeth A. Weaver II and Hillary H. Doyle

Humans are animals! This means that human brains have a a lot in common with many other animal brains. Almost all animal brains have the same basic parts: parts to help us move, think, and sense the world around us. Although the basic parts of the brain are the same among most animals, every animal's brain does something a little bit different and special. For example, cats have very good eyesight, and have more brainpower for their sense of sight. Similarly, dogs have a very good sense of smell, so the part of their brain that can identify different scents is very powerful compared to other animals.

Most furry animals, including humans, have a cortex. The cortex is the bumpy, wrinkly surface of the brain.



The cortex uses information coming in from our senses to help us understand the world, and sends signals out to other parts of the brain and body to help us move and communicate.The cortex is also responsible for learning, thinking, and decision-making. So if most furry animals have a cortex, how are human brains different?

Humans have a much larger and more wrinkly cortex compared with other animals of the same size. You might be surprised, but the wrinkles and folds are a very important part of what makes our brain so special. Imagine your brain is a piece of paper. Trying to fit a flat piece of paper into your head would be really hard to do, so how do you get it to fit? If you crumpled the paper into a ball, it fits! The crumpled piece of paper has lots of bumps and folds so you can fit a much larger piece of paper into a small space. Our brains work the same way: by adding a lot of bumps and folds, humans can fit a much larger brain into our head.

Humans have the special ability to speak, read and write, share ideas and imagine the future. Just like how dogs have brains that are best at finding and learning smells, human brains are best at thinking and communicating ideas and feelings. Our brains make us unique!

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