

November 16, 2017  
Flame Challenge

### What is Evolution?

Did you know that humans and chimps are distant relatives? It's true, we're related, and it's all due to a process called evolution! Evolution may seem complicated, but simply put, it is change over time. To help you understand what evolution is, let's break it down into parts. The evolution of all living things starts with a very small structure called deoxyribonucleic acid, or DNA. DNA has its own special language made of only four words, known as bases. The bases are adenine, thymine, guanine, and cytosine, or A T G and C. These bases combine to make complex sentences that give instructions for how plants and animals look and function. Sometimes these bases get scrambled up which can make an animal look or function differently than normal! This is called a mutation, which is a random change in how the DNA bases are arranged. These random changes can either help an organism survive longer than others, hurt their ability to survive, or cause no change at all.

When a mutation helps an organism survive, it's passed on to their children, and eventually their grandchildren! Over a long period of time, more and more organisms will have the same mutation that was originally seen hundreds of years before. This process is called natural selection and it helps explain why we look different than chimps, even though we're related! Evolution may have sounded tricky at first, but broken down it's pretty simple! It starts with a mutation and results in a change after centuries of natural selection. So, next time someone asks if you know how humans and chimps are related, you can say it's due to evolution!

Word Count: 277