

4-GY6 Inherited changes and fitness to survive

I would describe it as a small change that happens over millions of years to help them survive. We had to breed so that our parents would pass on genes to ourselves and those genes would be a small change and over millions of years all those genes would have given a small change.

You have to be fit to survive. If you're not fit, then you're either going to be eaten or die off.

Claim(s) **Evolution happens through small changes passed in the genes from parents to offspring over many generations and perhaps millions of years.**

Traits are inherited by offspring (children) from both parents.

Organisms that are not fit to survive will die off.

Any challenges to the expressed claim?

Anything to disagree with?

Any clarification needed?

Question(s). **What does it mean to be 'fit' in the context of 'survival of the fittest'?**

Note: Being 'fit' as used in the context of 'survival of the fittest' has a broader meaning than speed and athleticism. The 'fitness' refers to suitability to survive in the environmental conditions in which an organism is located. Every environment or ecosystem offers an interplay between natural resources, climate and the populations of organisms that compete to survive. There is always competition for resources and the organisms that are best fitted to make use of assets and protect themselves from predation are defined as the most 'fit'.

More plants and animals are reproduced than the environment can sustain. Those living things that have an advantageous variation are more likely to survive. If they survive, they are more likely to reproduce, so they pass on their advantage to their offspring and that trait becomes more frequent within their population.

See Primary Science article on [DeepTime](#)