

## 2-GY5 Evolutionary change is necessary for survival

*I think evolution is when something, an animal changes, or plant. It's a change so they can fit more where they're living, to help them to survive a little bit more. If they lived next to sea and there wasn't any other food, they would have to learn how to swim and how to dive for food, to get fish out of the water. When an animal has a child, I think it changes just a tiny bit, because it changes so it can survive. I think it just happens.*

**Claim(s)**      **Evolution is when animals and plants change in a way that helps them to survive better.**

**Living things must learn to adapt.**

**Any challenges to the expressed claim?**

**Anything to disagree with?**

**Any clarification needed?**

**Question(s).** **Does evolution apply to both animals and plants?**

**Can animals 'learn' to adapt?**

**Can plants 'learn' to adapt?**

**How does a species adapt to environmental change?**

**Note:** an individual animal can learn to adapt within its own lifetime. The adaptation of a *species* of animals or plants happens when small changes in individuals makes them better suited to their environment. The small change helps them to survive and thrive in the environment where they are located. Their survival success improves their breeding success, so more offspring with the same advantage are produced. Those individuals that do not have the advantageous trait are less likely to survive and reproduce themselves. While *individual* animals can learn to adapt in their own lifetime (as in urban foxes foraging for food in bins or peregrines nesting on high buildings), *species* adapt by living, feeding and reproducing themselves in a way that increases the proportion having an advantageous trait over generations.

More animals and plants are reproduced than there are sufficient resources to keep alive. Every living thing has to compete to survive (although humans are more able to change their environmental conditions than most other living things). The members of a species are not all exactly the same; there is within-species variation. Any slight difference that gives an individual an edge in the competition to survive (and thus to produce more offspring) results in the advantageous trait becoming more frequent in the population over deep time.

See the Primary Science articles on [Variation](#) and [DeepTime](#)