

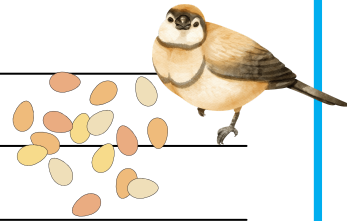


The Extraordinary Story of Evolution

1. What is the Theory of Evolution?

- An idea of how plants and animals adapt and change but with very little proof or evidence.
- An explanation of how early humans used fire and tools.
- An explanation of how every living thing came to be as it is today that is backed up by lots of evidence.

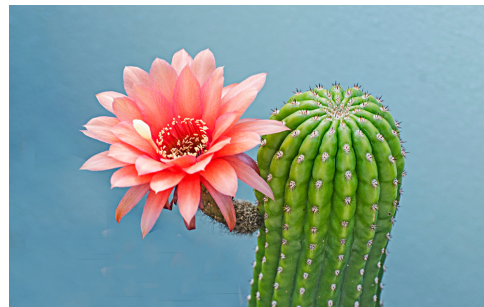
2. What did Charles Darwin notice about the finches on the Galápagos Islands?



The phrase '**Survival of the Fittest**' does not necessarily mean that the strongest or toughest plants or animals survive and get to pass on their DNA. It means that the organism **best suited to its environment** has the best chance of **survival and reproduction**.

3. Look at the pictures of the echidna and of the cactus below. Find out where echidnas and the cacti live. For each one, write a list of physical features that help them to survive and thrive in their environments. You may want to do some research.





4. In the podcast, Bryce and Christie told you about different evidence we have that supports the theory of evolution. Tick all the boxes that apply.

- fossils
- giraffes' long necks
- dinosaurs aren't still walking around
- DNA
- layers of rock with slightly different organisms
- animals and plants seem to fit perfectly into their environments



5. What role do fossils play in understanding our planet's history? Imagine this fish fossil was found in the middle of a modern day desert. What might we infer from that?



In the 1800s, the peppered moth, a light coloured moth with speckled wings, was common in England and hung out on light coloured trees and rocks that camouflaged them from the birds that wanted to eat them. Then, in 1945, one black peppered moth was caught. At this time factories were opening up in England, blowing dark smoke clouds into the air and covering trees and rocks with black soot. By 1950 there were almost no light coloured peppered moths, most were black.



Before 1945



After 1945

Talk with a partner and discuss the following questions.



6. If no black peppered moths were found before 1845 how did a black moth come to be? Do you think there were any black moths before this?



7. How do changes in the Earth's environment drive evolution? Can you think of any other examples?

Pics:
https://en.wikipedia.org/wiki/Peppered_moth

