Name: $\qquad$

## The Extraordinary Story of Evolution

1. Complete the following statements (we've given you some clues): The theory of evolution tells us that
$\qquad$
$\qquad$


The evidence that supports the theory of evolution is
$\qquad$
$\qquad$
$\qquad$

2. What did Charles Darwin notice about the finches on the Galápagos Islands and how did that help him to establish his theory of evolution?
$\qquad$
$\qquad$


The phrase 'Survival of the Fittest' does not necessarily mean that the strongest or toughest plants, animals, bacteria or fungi 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. Choose one species that you know a lot about. Thinks about its physical features and its habitat. Explain what beneficial adaptations this organism has gained over its evolution that have caused it to survive and thrive. Can you think of anything that might threaten the survival of this species?

In the 1800 s, 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.


After 1945
4. If no black peppered moths were seen before 1945 , where did the first one come from?
5. Explain how the peppered moth is an example of the theory of 'Survival of the Fittest'.
6. Why might it be problematic to consider humans as the 'top' of the evolutionary tree?

Consider how this perspective could impact our understanding of other species and ecosystems, and discuss the importance of viewing all species as interconnected and equally important parts of Earth's biodiversity.
$\qquad$
$\qquad$
$\qquad$


