

# [Charles darwin and the theory of evolution](https://assignbuster.com/charles-darwin-and-the-theory-of-evolution/)

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Charles Darwin and the Theory of Evolution Charles Darwin is widely known as the father of evolutionary biology. It is believed that no one has influenced our knowledge of life on Earth as much as he has. His theory of evolution by natural selection, which has unified the theories of the life sciences, explained where all the diverse living things came from and how they have been able to adapt to their specific environments. His theory reconciled a wide range of evidence to make sense of the facts that evidence has brought up. Darwin's theory has made a great impact, as opinions on it are still debated today, if not more than they were in his time. Even without his theory of evolution, Darwin would still be considered one of the most influential workers in the history of science, as he has done much original work in geology, botany, biogeography, invertebrate zoology, psychology, and scientific travel writing. Darwin's theory states that all life is related and has descended from a common ancestor and, over time, as genetic mutations occur within the beings' genetic code, the being reacts and adapts to its surroundings, or evolves. His theory stated that beneficial mutations are preserved as they aid survival, otherwise known as " natural selection." These beneficial mutations were passed down through generations until, over time, the mutations accumulated to the point where the result was an entirely different organism. Natural selection is the preservation of a functional advantage that enables a species to compete better in the wild, more commonly known as " survival of the fittest." Darwin wrote, "…Natural selection acts only by taking advantage of slight successive variations; she can never take a great and sudden leap, but must advance by short and sure, though slow steps." [1] Darwin's Theory of Evolution is said to be a " theory in crisis" due to the tremendous advances we have made in molecular biology, biochemistry, and genetics throughout the past fifty years. We know now that there are tens of thousands of irreducibly complex systems on the cellular level. Whether Dawin's Theory of Evolution is true or not, Charles Darwin vastly expanded our knowledge on the world we live in. Footnotes: 1; Charles Darwin, " On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life," 1859, p. 162.