

4.7 Natural Selection Vs Punctuated Equilibrium

	Darwinian Evolution	Punctuated Equilibrium
Similarities	<p><i>Organisms change over time due to various selective pressures in their environment</i></p> <p>Evolution occurs by natural selection: populations have changed overtime and organisms have become more suited to their environments due to selective pressures.</p>	
Differences	Populations change slowly and gradually overtime	Evolution occurs in short bursts of rapid change, followed by long periods of stability within populations
Proposal	Darwin and Wallace in the late 1850s based on living organisms and few fossil evidence	Gould and Eldridge in the 1970s based on fossil evidence
Fossil evidence	Transitional forms: archaeopteryx However there was limited evidence	Fossilised remain show millions of years going by without without any noticeable evolutionary change to most organisms E.g. soft bodied organism dominated the seas for hundreds of millions of years and then in a period of a few million years, they disappeared and were replaced by organisms with shells and skeletons.