

CB4: **Natural Selection and Genetic Modification (Paper 1)**

Lesson	Objectives Tracker Sheet	Date covered	I know this well	I need to do more work on this
CB4a Evidence for human evolution	B4.4 Describe the evidence for human evolution, based on fossils, including: Ardi from 4.4 million years ago Lucy from 3.2 million years ago Leakey's discovery of fossils from 1.6 million years ago.			
	B4.5 Describe the evidence for human evolution based on stone tools, including: the development of stone tools over time how these can be dated from their environment.			
CB4b Darwin's theory	B4.2 Explain Darwin's theory of evolution by natural selection.			
	B4.3 Explain how the emergence of resistant organisms supports Darwin's theory of evolution including antibiotic resistance in bacteria.			
CB4c Classification	B4.7 Describe how genetic analysis has led to the suggestion of the three domains rather than the five kingdoms classification method.			
CB4d Breeds and varieties	B4.8 Explain selective breeding and its impact on food plants and domesticated animals			
	B4.10 Describe genetic engineering as a process which involves modifying the genome of an organism to introduce desirable characteristics.			
CB4e Genes in agriculture and medicine	B4.11 H Describe the main stages of genetic engineering including the use of: restriction enzymes ligase sticky ends vectors.			
	B4.14 Evaluate the benefits and risks of genetic engineering and selective breeding in modern agriculture and medicine including practical and ethical implications.			