HUMAN EVOLUTION

BIOLOGY LEVEL 3

Strategy Guide

This standard can freak a lot of people out - as there are a lot of big words in it! A lot of students get caught up in trying to remember the names of the different hominins, or the dates that they were around in. The good news is, this standard is not about memorising names or terms - it's all about understanding patterns and processes. Most questions will give you all the specific information you need - and the examiners will test you on your ability to apply your knowledge of evolutionary patterns to the specific context you are being asked about.

OVERVIEW OF THE STANDARD/STRUCTURE OF THE EXAM

This standard is broken into three key parts:

1. Biological evolution
2. Cultural evolution
3. Dispersal theories

The exam is likely to have atleast one question on biological evolution and one on cultural evolution. The third question is likely to be about any of the three key parts.

CONCEPTS AND SKILLS TO FOCUS ON

Although every aspect of the exam is equally important, here are some key concepts to focus your study on:

Discussing how skeletal changes reflect bipedalism and development of walking:

The biological evolution section of this standard is all about linking physical changes to behavioural ones. Instead of just being able to describe the evolution of walking, you must be able to link this concept to what can physically be seen. There are a number of different skeletal changes you can discuss for the standard - check out our walkthrough guide for a comprehensive list!

Understanding how different aspects of cultural evolution are linked:

Development of tools, fire, communication and gathering did not happen as independent events. In fact, they all helped to influence each other. Being able to discuss how cultural evolution occurred as a connected process will help you remember all of the key events, as well as get your answers up towards Merit and Excellence level,

Understanding the differences between the dispersal theories:

The dispersal theories are often the part of the exam that students neglect to revise for! Because there are only two theories, it can seem easy to wing. However, it is important to make sure you can confidently differentiate between the Out of Africa and Multiregional theories, as well as describe the evidence available for each.

COMMON MISTAKES:

From the NCEA gods themselves:

Not understanding advantages and disadvantages of farming:

This is a bit of a specific one - but something that NCEA students often forget! As with a lot of content for this exam, in order to get top marks, you need to be able to do more than describe events - but instead, discuss how they influenced the overall evolution of humans.

Not linking the question back to the context:

This standard is all about linking patterns to the context or series of images given to you by a question. Therefore, in order to nail it, you need to be able to take a common pattern (such as development of bipedalism), and adapt your answer to fit the series of skeletal changes, or behaviours given to you in the question.

Not being able to arrange tool cultures:

Development of tool culture is just as important as understanding the biological development for this standard. Make sure you can name and discuss the different tool cultures, as well as the impacts they had on the development of culture.

Not being able to discuss specific skeletal changes:

Once you nail the overall patterns, it is important that you are able to discuss some specific skeletal changes (such as curving of the spine) and how they relate to specific aspects of biological evolution.

OVERALL STUDY AND EXAM STRATEGY:

This standard has two layers of detail: the larger scale patterns of evolution, as well as the specific biological and cultural changes that occured as a result of it. Being able to weave these two layers together is a key part of gaining top marks in this exam. We suggest becoming familiar with the overarching patterns first - then building on this with specific details and key terminology.