Assessment schedule: practice paper 2026

AS 91606 Demonstrate understanding of trends in human evolution · Vertex Academy practice paper, not an NZQA paper

QUESTION ONE

Part	Evidence	Achievement (u)	Merit (r)	Excellence (t)
(a)	foramen magnum: central vs towards the back spine: S-shape vs C-shape pelvis: short, broad vs long, narrow femur angled in vs vertical	Describes three bipedal skeletal features, each compared with the chimpanzee.		
(b)	broad bowl pelvis gluteal muscles carrying angle of femur less sway	Describes the pelvis as short and broad. Describes the femur as angled inwards.	Explains how the pelvis (support and muscle attachment) and the angled femur (feet under the centre of mass) give balance and efficient walking.	
(c)	Laetoli 3.66 mya: arched foot, in-line big toe Lucy 3.2 mya: bipedal pelvis and femur, but climbing arms small brain pressures: mosaic habitat and energy efficiency; free hands; seeing over grass; less heat stress	Describes Laetoli as evidence of bipedalism. Describes Lucy as bipedal but still able to climb. Describes one selection pressure.	Explains that bipedalism evolved before the large brain using the evidence, OR explains how a selection pressure favoured bipedalism.	Discusses the evidence (bipedalism by 3.66 million years ago, combined with climbing, before brain expansion) AND at least two selection pressures linked to survival and reproduction in a changing habitat.

QUESTION TWO

Part	Evidence	Achievement (u)	Merit (r)	Excellence (t)
(a)	Oldowan Acheulean	Describes both tool cultures AND the associated species.		

(b)	tools fire less chewing more energy	Describes tools giving access to meat. Describes cooking making food softer. Describes the brain as needing a lot of energy.	Explains how a higher-quality, softer diet from tools and cooking led to smaller teeth AND supported a larger brain.	
(c)	farming permanent settlements surplus costs: poorer diet and health, disease, famine risk	Describes permanent settlements. Describes population growth. Describes one cost to health.	Explains how food surpluses led to settlements, population growth or specialisation, OR explains a health cost.	Discusses several changes linked to food surplus (settlement, population, specialisation, technology, social structure) AND weighs them against the costs (diet, health, disease, famine).

QUESTION THREE

Part	Evidence	Achievement (u)	Merit (r)	Excellence (t)
(a)	H. sapiens evolved in Africa (about 300 000 years ago) left Africa within about the last 70 000 years replaced Neanderthals and Denisovans, with some interbreeding	Describes H. sapiens evolving in Africa, then spreading out of Africa and replacing other hominins.		

(b)	mtDNA: maternal, steady mutation rate most diversity in Africa non-African lineages a subset of African molecular clock	Describes mtDNA as inherited from the mother. Describes the highest mtDNA diversity as in Africa.	Explains that greatest diversity means the oldest population, AND that non-African lineages branch from African ones (or the molecular clock date), supporting Out of Africa.	
(c)	glacial: sea level down about 120 m Beringia Sunda and Sahul still separated Neanderthal DNA 1 to 2% in non-Africans Denisovan DNA in Papuans	Describes lower sea levels exposing land bridges. Describes interbreeding with Neanderthals.	Explains how land bridges (Beringia, Sunda, Sahul) and the need for sea crossings shaped dispersal, OR explains what the Neanderthal and Denisovan DNA shows.	Discusses how climate and sea-level change both opened routes and required sea crossings, AND what the Neanderthal and Denisovan DNA shows about the timing and place of contact, supporting Out of Africa with some interbreeding.

Judgement for each question

N0	N1	N2	A3	A4	M5	M6	E7	E8
No response, or nothing relevant.	One Achievement point, partly described.	Two Achievement points.	Three Achievement points.	Four Achievement points.	One Merit point.	Two Merit points.	One Excellence point, with a minor error or omission.	One Excellence point, complete.

Grade score out of 24 (each question's grade: N0 = 0 to E8 = 8): Not Achieved 0 to 7, Achieved 8 to 13, Merit 14 to 18, Excellence 19 to 24 (the 2025 exam's cut scores).