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**Task 11: Hominid Evolution - Validation MARKING KEY**

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Score\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_/30

1. Describe 3 features of *H.naledi* that would refute it from being placed in the genus *Homo.*

**Flared hips**

**Shoulders and torso**

**3rd molar / premolar roots**

**Small brain – 500 cm3**

**Long curved hands for climbing and swinging/brachiation** – (any 3 for 3 marks)

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1. What is the inferred form(s) of locomotion for *H.naledi*? What evidence supports this?

**Bipedal (1)**

**Long legs and feet (1) almost the same as Homo Sapiens (1)**

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1. Why is South Africa a significant location for such a potentially early hominid?

**Produced many fossils in the first half of the 20th century and named ‘*the cradle of humankind’ (1)***

Both need to be stated or just 1st half?

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1. The teeth of *H.naledi* were described as human; describe two features that would place the teeth closer to a human primate rather than apes.

**Like Homo Sapiens, they had small crowns (1) and 5 cusps (1)**

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1. *H.naledi’s* cranial capacity places the hominid between which two other hominid groups?

**Cranial capacity was smaller than H.Erectus and larger than A. Afarensis (1)**

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1. ‘Sexual dimorphism’ refers to observable differences between the male and female skeleton. State one piece of evidence that suggests that *H.naledi* had sexual dimorphism.

**Either:**

**Height difference: male was 5 foot and 100 lbs/ females were shorter and lighter (1)**

**Or**

**Brain size: male brain – 560cm3 and female brain – 465cm3 (1)**

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1. Physical evidence suggests that *H.naledi* may have used and possibly manufactured primitive tools.
2. What physical evidence suggests *H.naledi* was a tool user?

**Structure of the wrist bones indicated that it used tools (1)**

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1. Name the earliest tool culture associated with hominids. Your response should include a description of the manufacture technique, materials used and uses for the hominid known to use this tool culture.

**Homo Habilis – stone tools (1 – must have)**

**Manufacture technique: stones like obsidian were sharpened using another stone like granite (hammerstone) (1)**

**Materials: Obsidian, granite (hammerstone) (1)**

**Uses: butchery/ cutting through leather/ prey (1)**

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1. *H.naledi’s* foot was described as ‘indistinguishable from our own’. Describe 3 features of *H.naledi’s* foot and describe each feature’s significance to locomotion.

**Non-opposable big toe /Large big toe (1): weight can be propelled forward (1)**

**Elongated tarsus – long feet (1): to allow formation the arch? increases efficiency**

**Medial longitudinal arch (1): allow for bipedal weight distribution/ striding gait (1)**

**Large calcaneus (1) – heel strike/ weight bearing in striding gait**

**Smaller toes all in alignment (1) - better mechanics / they were in the way 😊 increases efficiency**

(Any 3 with explanations for 6 marks) - Exact benefits to be edited\*

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1. State the major cultural feature agreed upon for *H.naledi* in the 3 articles*.*

Describe the evidence suggesting this cultural feature for *H.naledi* and two other pieces of evidence that would further provide evidence supporting this cultural feature in hominid groups.??? Change to naledi?

**Burial (1 – must have) / disposal of bodies**

**Impossible for the corpses to be left inside of the cave any other way, besides being brought there by other Naledis (1)**

**Couldn’t have been washed in by ocean current – no remains of sea life at all (1)**

**Couldn’t have been left there by predators – no teeth marks (1)**

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1. Name the hominid group known to share the above cultural feature with *H.naledi.*

Your response should include 3 other cultural features of this hominid group.

**Homo Neandertal (1 – must have)**

**Tools: for hunting and butchery,**

**Fire: for hunting, warmth, protection, to cook,**

**Shelter: caves, open air shelter construction,**

**Clothing: wore animal hyde,**

**Art: body decoration, paint**

(any 3 for 3)

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