

1. How is the robust form, *Paranthropus*, different from the gracile *Australopithecus africanus*?

- A. *Paranthropus* have tails
- B. *Paranthropus* have sagittal crests with large teeth and jaw muscles
- C. *Paranthropus* are short in stature and have long arms
- D. *Paranthropus* have opposable big toes like apes, and long canines too
- E. *Paranthropus* are quadrupeds, not bipeds, and are nocturnal

2. Which australopithecine is most like ourselves in terms of teeth and chewing? A. Gracile B. Robust

2a Which australopithecine is the most recent, becoming extinct 1 million years ago? A. Gracile B. Robust

3 The first ever discovery of a Pliocene fossil hominid in East Africa was:

- A. Found by the Leakeys, Olduvai Gorge, 1959
- B. Now called *Paranthropus boisei*
- C. a very robust type, with huge teeth and jaws
- D. Originally called "Zinjanthropus"
- E. All of these are true

3a. Which is TRUE about Potassium/Argon dating?

- A. It can be used to date bone fossils themselves, but not the rocks they are buried in.
- B. It can be used to date sedimentary rock like limestone, but not volcanic materials
- C. It can be used for dating from the present back to a million years old, no older than that
- D. Argon 40 decays into Potassium 40, so the more K-40, the longer the time since the rock was molten
- E. It is a chronometric (or "absolute") dating method, not a "relative" (or "stratigraphy") method.

4. Why can we get good dates for east African hominid fossils but not South African ones?

- A. In South Africa they were buried in the limestone forming at the bottom of the ocean when they drowned
- B. In South Africa they were fried by the volcanos that killed them
- C. In South Africa they were washed into caves as secondary deposits
- D. South Africa is too close to the South Pole
- F. In South Africa, the animals that australopithecus killed messed up the dating

4a. Which is TRUE?

- A. Dart called the killer ape culture of Australopithecus "Osteodontokeratic"
- B. South African Pliocene hominids were not hunters but rather the prey of leopards
- C. "Taphonomy" is the term for the study of the relationship between animals of the past and the fossils we discover and interpret, including death and decay, mineralization, biases of preservation, etc
- D. "Endocast" is the term for a preserved rough image of a brain.
- E. All of these are true.

5. In 1924 the first ever find was made of a fossil Pliocene hominid — a biped.

The finder's name was: A. Raymond Dart B. Robert Broom C. Charles Dawson

5a. The place the fossil was found: A. Sussex, England B. Taung, South Africa

C. Perth, Australia D. Kenya, east Africa E. Hadar, Ethiopia

6. The finder declared it was a hominid and gave it the species name:

- A. *Eoanthropus Dawsoni*
- B. *Australopithecus africanus*
- C. *Afropithecus australis*
- D. *Paranthropus robustus*
- E. *Australopithecus dartus*

6a. The fossil consisted of three body parts of a juvenile: the jaw and:

- A. the face and a natural endocast of the brain
- B. the skull and legs
- C. The bones of one arm and a leg
- D. the foramen magnum and the spine
- E. the pelvis

7. The finder claimed it was a hominid, not a pongid, because it walked upright and:

- A. It had small canines
- B. It had a curved dental arch
- C. Its brain had convolutions and relative proportions not found in apes
- D. All of the above.

7a. From the 3 pieces, he knew it was bipedal since it lived on the savanna and:

- A. Its legs were adapted to bipedalism
- B. Its ribs were curved
- C. The brain indicated that the foramen magnum was directly under the skull
- D. The jaw was curved
- E. All of the above

8. It was a decade later before any more fossils of these Pliocene hominids were discovered. In 1936 an adult of this species was found at:

A. Sussex B. Sterkfontein C. Taung D. Kromdraai E. Ethiopia

by: A. R Dart B. R Broom C. C Dawson D. V Sarich E. Sir Arthur Keith

8a. In 1938 a different, more robust, kind, called *Paranthropus robustus*, was found at:

A. Sussex B. Sterkfontein C. Taung D. Kromdraai E. Ethiopia

by: A. R Dart B. R Broom C. C Dawson D. V Sarich E. Sir Arthur Keith

9. Another famous fossil had been discovered by Charles Dawson and described by Sir Arthur Keith — but it turned out to be a deliberate fraud, a hoax. It is commonly known as:

A. Piltdown B. Australopithecus C. Paranthropus D. Aegyptopithecus

and was found in

A. 1859 B. 1894 C. 1912 D. 1924 E. 1938

9a. The fake was "found" in:

A. England B. South Africa C. Australia D. east Africa E. Ethiopia

and the fake fossil differed from the real ones in that only the fake:

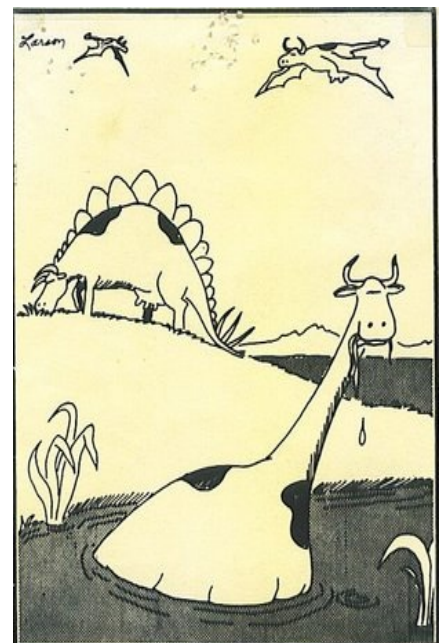
- A. Was found in Africa
- B. Was found in Asia
- C. Had a large brain
- D. Had a foramen magnum
- E. Was a biped

10. How do we know that *Paranthropus* and *Australopithecus* are not males

- and females of the same species? A. They were found in different caves, very unlikely for males and females of the same species
- B. The fossils found with them indicate they live in different geological time periods
- C. Their teeth and jaws indicated they were adapted to eat different kinds of food
- D. We can identify males and females of each species
- E. All of these are true

Print first name _____ last name _____

Bonus: What is the difference between being a 'splitter' and being a 'lumper'?



Sixty-five million years ago, when cows ruled the earth