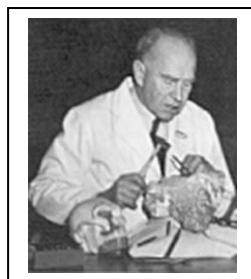


Grade 7 Social Sciences Worksheet

Assessment Task: Early Hominid evolution South Africa

Early hominid evolution

Study the resources and answer the questions that follow.



Prof Raymond Dart



Mary and Louis Leakey



Charles Darwin was the first scientist to propose the theory of evolution in 1871 in a publication called “The Origin of Species”. Most people, especially religious leaders, did not accept this at the time. However, today the theory of evolution is generally accepted by scientists the world over. Some religious leaders continue to reject evolution.

In 1924, Raymond Dart, an Australian working at Wits University, was given a rock containing a fossil by a quarry foreman from Taung in the Northern Cape. Dart, after months of work to carefully chisel the fossil out of the rock, announced to the world that he had identified ‘the missing link’ between man and ape, calling it *Australopithecus africanus* – the Southern Ape of Africa.

In the late 1940s, Dr Robert Broom, a retired medical doctor, found a large number of fossils at Sterkfontein, Kromdraai and Swartkrans. He also found ‘Mrs Ples’, the first Australopithecine ever found, at Sterkfontein. ‘Ples’ is short for ‘*plesanthropus*’, almost human. It has since turned out, though, that Mrs Ples was probably a male! Broom’s most important find was a hominin with a very heavy jaw, which he called ***Paranthropus robustus*** (*the robust ape parallel to man*).



“Taung Child” reconstruction
(*Australopithecus africanus*)

Grade 7 Social Sciences Worksheet

The work of excavating at Sterkfontein and its neighbouring sites of Swartkrans and Kromdraai continues to this day under the leadership of Wits University paleoanthropologist Dr Ron Clarke. A paleoanthropologist is someone who studies ancient humans. Ron Clarke's team has recently discovered a **complete skeleton** called 'Littlefoot', so named because the first bone of the skeleton that was found was a part of a foot. This is the first complete skeleton of *Australopithecus* ever found.

In East Africa, a team led first by Louis Leakey and later his son, Richard, has made many important discoveries at Olduvai in Africa's Great Rift Valley. Other finds in East Africa, most importantly the discovery of 'Lucy', a 40% complete skeleton at Hadar in Ethiopia, have added to our total knowledge. Scientists are now convinced that modern man is the direct descendant of one of these varieties of early hominins (man-like animals). There remains a debate as to where in Africa modern man (*homo-sapiens*) evolved, but we are certain that Africa is the Cradle of Humankind. Indeed, the area around Sterkfontein has been declared a World Heritage Site and is officially known as '*The Cradle of Humankind*'.

Palaeoanthropology was given a bad name by the announcement of the discovery of a skull at Piltdown in England in 1912. 39 years later it was proved to be a fraud, made out of a modern skull and carved pig jaw bones. This is why it is so important that scientific discoveries are carefully studied by other scientists. It is for this reason that the overwhelming opinion of modern scientists is that man originated in Africa, although the picture is far from complete.

Questions

Choose the correct answers to questions 1 to 4 from the following list of names:

- A: Ron Clarke
- B: Louis Leakey
- C: Raymond Dart
- D: Robert Broom
- E: Charles Darwin

1. The scientist who first developed the theory of evolution. [1]
2. The scientist who identified and named the first 'ape-man'. [1]
3. The scientist who found many fossils in East Africa. [1]
4. The scientist who worked at Sterkfontein and identified a large number of fossil hominins. [1]

Grade 7 Social Sciences Worksheet

5. The scientist who is busy excavating 'Littlefoot'. [1]
6. Look at the map of Africa's early hominin discovery sites. Describe what part of Africa these are found in. [2]

Match the following important discoveries with the sites A to D below.

7. Lucy [1]
8. The first *Australopithecus* find [1]
9. Mrs Ples [1]
10. Littlefoot [1]

- A: Olduvai
 B: Sterkfontein
 C: Taung
 D: Hadar

Discovery	Site	Age (Millions of years)
<i>Australopithecus boisei</i>	Olduvai	1.75 – .25 million years old
<i>Australopithecus aethiopicus</i>	Lake Turkana	2.5 million years ago
<i>Australopithecus afarensis</i>	Hadar	3.2 – 3.18 million years
<i>Australopithecus afarensis</i>	Laetoli	3.7 – 3.5 million years
<i>Australopithecus anamensis</i>	Lake Turkana	4.2 – 3.9 million years

It is difficult to date the Sterkfontein fossils, as the rocks in which they are found are very difficult to date, but similar age ranges are claimed.

11. Why is 'Littlefoot' such an important fossil? [4]
12. Draw a timeline to describe these finds. The oldest skeletons of modern man are believed to be about 1 to 1.5 million years old. [6]
13. Write a paragraph to explain why palaeoanthropology is such an important science. [5]
14. Explain why Sterkfontein is so popular with tourists. [5]

Grade 7 Social Sciences Worksheet

Suggested Solutions

1. E [1]
2. C [1]
3. B [1]
4. D [1]
5. A [1]
6. Almost all the fossil finds are in East and Southern Africa. [2]
7. D [1]
8. C [1]
9. B [1]
10. B [1]
11. It is the first complete skeleton to be excavated, so giving a much better idea of the creature. [4]
- 12.



- [6]
13. Palaeoanthropology teaches us about who we are and where we came from, as well as our relationship with other species. Any sensible answer. [5]
 14. History of all kinds attracts tourists. There is a certain wonder in knowing about our earliest human or near human relatives. Sterkfontein is also a cave system which people like to know about, giving a sense of adventure. Any sensible answer. [5]