

Grade 7 Social Sciences Worksheet

Assessment Task: History Archaeology 2

Time lines: The history of the Earth / Archaeology

Question 1 (Work in pairs)

A line of rice five billion years long

1. Take a cup of rice. Count the number of grains in one teaspoon of rice. Count the number of teaspoons of rice in one cup. How many grains are there in a cup of rice? [2]
- 2.1 Class members space out along a corridor (or up and down the class) approximately 2 m apart. The class spreads the grains of rice out in a thin straight line. (It will be between 30 m and 40 m long.)
If the line represents 4 billion years (approximately the same as the scientifically accepted age of the Earth), how many metres will 1 billion years be? [2]
- 2.2 If 10 m contains 1 000 grains of rice, how many grains of rice will 1 million years be? [2]
3. Label one end of the line 'The Creation of the Earth' and the other end of the line 'The Present'.
Complete the following tables to show how many grains of rice back from 'The Present' the following events appeared:

The height of the Ancient Egyptian Civilisation	5 000 years	
End of the last Ice Age	12 000 years	
Human speech	150 000 years	
Appearance of modern humans	1 million years	
Little Foot at Sterkfontein Caves	3 million years	
Extinction of the dinosaurs	65 million years	
Formation of the great coal deposits	500 million years	
Development of jelly fish, coral and worms	1 200 million years	
Oldest fossils	3 600 million years	
Formation of the Earth	> 4 000 million years	

Place labels on the line to represent the different events. [10]

Grade 7 Social Sciences Worksheet

4. What do you conclude about the age of the Earth? [4]

Question 2

5. Have a class discussion about the last 5 000 years, a tiny fraction of one grain of rice. This is the length of recorded history. Mention, in brief, major events in history. E.g.: The building of the Great Pyramid, the Birth of Jesus, the voyages of 'discovery' leading to colonialism, etc. Exact dates don't matter. Ask questions like: How old is the oldest writing? How old is Bushman (Khoi San) rock art? Each pair must draw their own time-line of 10 major events in history, starting 5 000 years ago. This can be researched in the library or with the teacher's help. This is about the time of recorded history. The scale must be accurate at 1 cm to represent 500 years. [10]
6. Write a report explaining why you chose those 10 events. [10]
7. Conclude with a discussion of the nature of beliefs (religion), sources and evidence. Introduce the ideas of fossils, oral history, rock art, artefacts, burial sites, ancient ruins and written histories. These are ideas that are used throughout the SS (History) curriculum and need to be clearly understood.

Grade 7 Social Sciences Worksheet

Suggested Solutions

Question 1

A line of rice five billion years long

1. Take a cup of rice. Count the number of grains in one teaspoon of rice. Count the number of teaspoons of rice in one cup. How many grains are there in a cup of rice?
(Number of grains in a spoon) x (Number of spoons in a cup), e.g. $300 \times 25 = 7\,500$
[2]

- 2.1 Class members space out along a corridor (or up and down the class) approximately 2 m apart. The class spreads the grains of rice out in a thin straight line. (It will be between 30 m and 40 m long.)
If the line represents 4 billion years (approximately the same as the scientifically accepted age of the Earth), how many metres will 1 billion years be?
Divide the length of the line by 4, i.e. approximately 10 m.
[2]

- 2.2 If 10 m contains 1 000 grains of rice, how many grains of rice is 1 million years?
A billion is 1 000 million, so 1 grain of rice is 1 million years.
[2]

3. Label one end of the line 'The Creation of the Earth' and the other end of the line 'The Present'.

Complete the following tables to show how many grains of rice back from 'The Present' the following events appeared:

The height of the Ancient Egyptian Civilisation	5 000 years	< 1 grain
End of the last Ice Age	12 000 years	< 1 grain
Human speech	150 000 years	< 1 grain
Appearance of modern humans	1 million years	1 grain
Little Foot at Sterkfontein Caves	3 million years	3 grains
Extinction of the dinosaurs	65 million years	65 grains
Formation of the great coal deposits	500 million years	500 grains
Development of jelly fish, coral and worms	1 200 million years	1 200 grains
Oldest fossils	3 600 million years	3 600 grains
Formation of the Earth	> 4 000 million years	4 000 grains

Place labels on the line to represent the different events.

[10]

Grade 7 Social Sciences Worksheet

4. What do you conclude about the age of the Earth? [4]
The Earth is immensely old. Humans have been around for only a very short space of time. There is more than enough time for human evolution to take place.

Question 2

5. Have a class discussion about the last 5 000 years, a tiny fraction of one grain of rice. This is the length of recorded history. Mention in brief major events in history. E.g.: The building of the Great Pyramid, the Birth of Jesus, the voyages of 'discovery' leading to colonialism, etc. Exact dates don't matter. Ask questions like: How old is the oldest writing? How old is Bushman (Khoi San) rock art? Each pair must draw their own time-line of 10 major events in history, starting 5 000 years ago. This can be researched in the library or with the teacher's help. This is about the time of recorded history. The scale must be accurate at 1 cm to represent 500 years. [10]
1 mark for each correctly placed event.
6. Write a report explaining why you chose those 10 events. [10]
Must demonstrate that the learner appreciates important moments in history. Should also select events from different periods within the last 500 years.
7. Conclude with a discussion of the nature of beliefs (religion), sources and evidence. Introduce the ideas of fossils, oral history, rock art, artefacts, burial sites, ancient ruins and written histories. These are ideas that are used throughout the SS (History) curriculum and need to be clearly understood.