

**UNIT 1: LAKE CHAD**

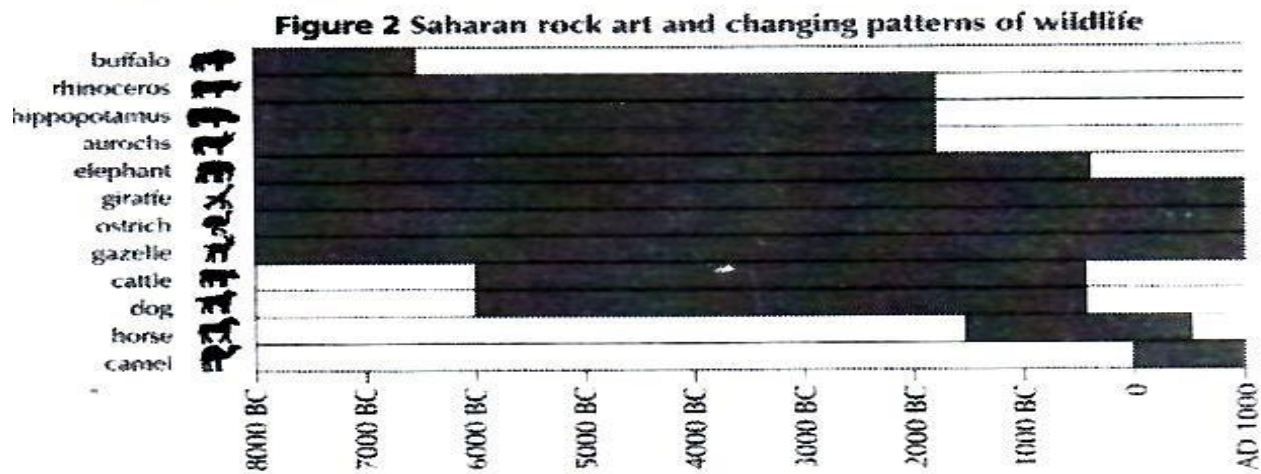
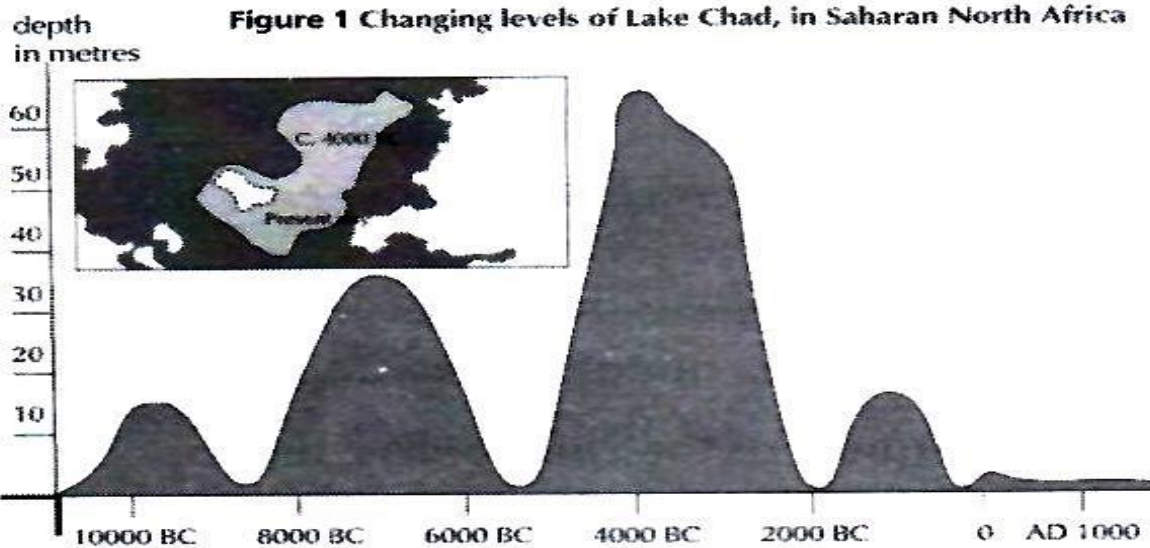


Figure 1. shows changing levels of Lake Chad, in Saharan North Africa. Lake Chad disappeared completely in about 20,000 BC, during the last Ice Age. In about 11,000BC it reappeared. Today, its level is about the same as it was in AD 1000.

Figure 2. shows Saharan rock art (ancient drawings or painting found on the walls of caves) and changing patterns of wildlife.

*Source:* Past Worlds: The Times Atlas of Archaeology, Times Books Limited 1988

**Question 1:** What is the depth of Lake Chad today?

- A. About two metres.
- B. About fifteen metres.
- C. About fifty metres.
- D. It has disappeared completely.
- E. The information is not provided.

**Question2:** In about which year does the graph in Figure 1 start?

.....

**Question 3:** Why has the author chosen to start the graph at this point?

.....

**Question 4:** Figure 2 is based on the assumption that

- A. the animals in the rock art were present in the area at the time they were drawn.
- B. the artists who drew the animals were highly skilled.
- C. the artists who drew the animals were able to travel widely.
- D. there was no attempt to domesticate the animals which were depicted in the rock art.

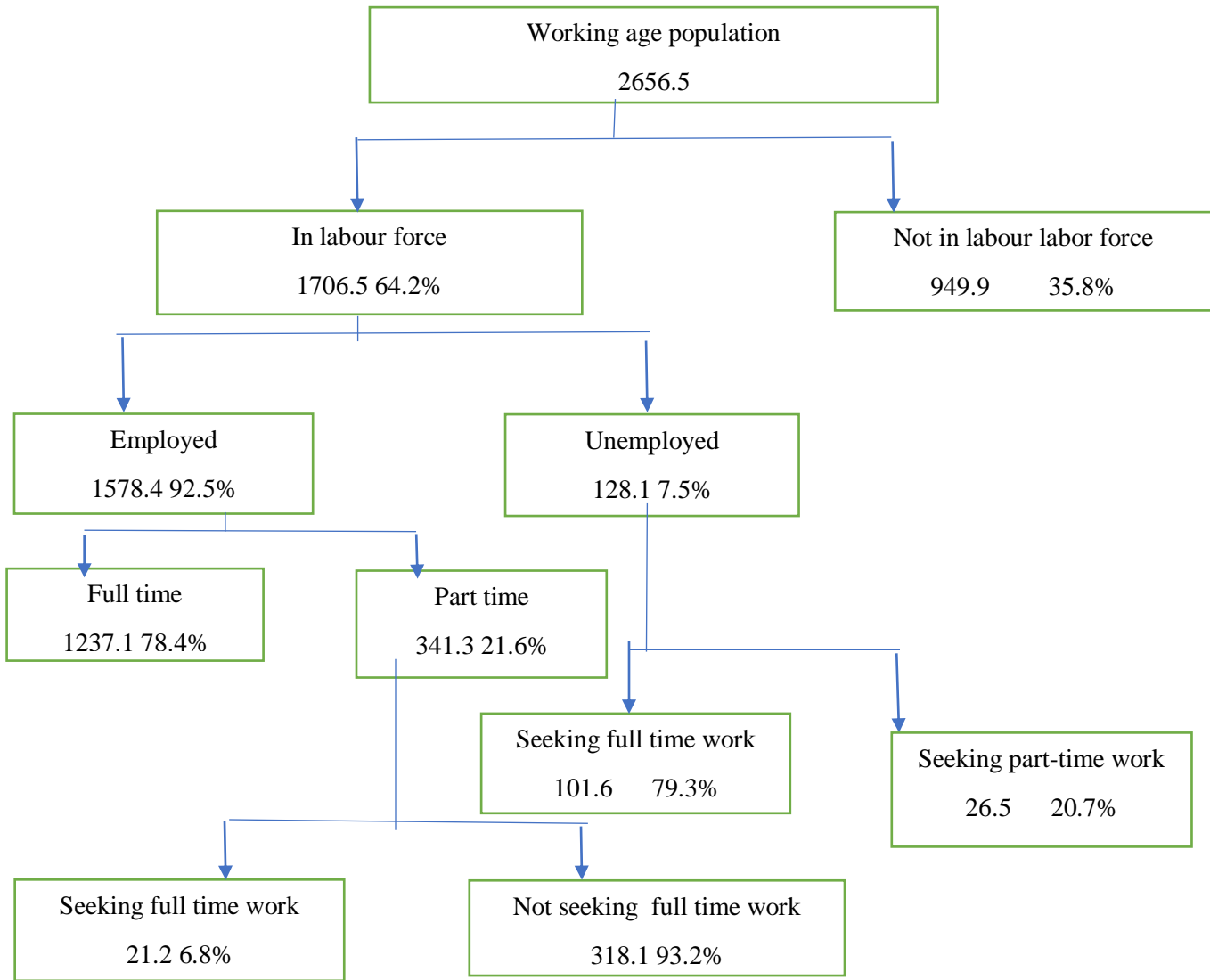
**Question 5:** For this question you need to draw together information from Figure 1 and Figure 2. The disappearance of the rhinoceros, hippopotamus and aurochs from Saharan rock art happened

- A. at the beginning of the most recent Ice Age.
- B. in the middle of the period when Lake Chad was at its highest level.
- C. after the level of Lake Chad had been falling for over a thousand years.
- D. at the beginning of an uninterrupted dry period.

**UNIT 2: LABOUR**

The tree diagram below shows the structure of a country’s labour force or “working-age population”. The total population of the country in 1995 was about 3.4 million.

**The Labour Force Structure year ended 31 March 1995 (000s)**



1. Numbers of people are given in thousands (000s)
2. The working-age population is defined as people between the ages of 15 and 65.
3. People “not in labour force” are those not actively seeking work and/or not available for work

(Source: D Miller, Form 6 Economics, ESA Public)

**Question 6:** What are the two main groups into which the working-age population is divided?

- A. Employed and unemployed.
- B. Of working age and not of working age.
- C. Full-time workers and part-time workers.
- D. In the labour force and not in the labour force.

**Question 7:** How many people of working age were not in the labour force? (Write the number of people, not the percentage.)

.....

**Question 8:** In which part of the tree diagram, if any, would each of the people listed in the table below be included? Show your answer by placing a cross in the correct box in the table.

The first one has been done for you.

	“In labour force: employed”	“In labour force: unemployed”	“Not in labour force”	Not included in anycategory
A part-time waiter, aged 35	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A business woman, aged 43, who works a sixty-hour week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A full-time student, aged 21	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A man, aged 28, who recently sold his shop and is looking for work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A woman, aged 55, who has never worked or wanted to work outside the home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A grandmother, aged 80, who still works a few hours a day at the family’s market stall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 9:** Suppose that information about the labour force was presented in a tree diagram like this every year.

Listed below are four features of the tree diagram. Show whether or not you would expect these features to change from year to year, by circling either “Change” or “No change”. The first one has been done for you.

Features of Tree Diagram	Answer
The labels in each box (e.g. “In labour force”)	Change / <u>No change</u>
The percentages (e.g. “64.2%”)	Change / No change
The numbers (e.g. “2656.5”)	Change / No change
The footnotes under the tree diagram	Change / No change

**Question 10:** The information about the labour force structure is presented as a tree diagram, but it could have been presented in a number of other ways, such as a written description, a pie chart, a graph or a table.

The tree diagram was probably chosen because it is especially useful for showing

- A. changes over time.
- B. the size of the country’s total population.
- C. categories within each group.
- D. the size of each group.

### UNIT 3: POLICE

*A murder has been committed but this suspect denies everything. He claims not to know the victim. He says he never knew him, never went near him, never him, never touched him... The police and the judge are convinced that he is not telling the truth. But how to prove it*

#### **Scientific Police Weapons**

At the crime scene, investigators have gathered every possible shred of evidence imaginable: fibres from fabrics, hairs, finger marks, cigarette ends....The few hairs found on the victim’s jacket are red. And they look strangely like the suspect’s. If it could be proved that these hairs are indeed his, this would be evidence that he had in fact met the victim.

#### **Every individual is unique**

Specialists set to work. They examine some cells at the root of these hairs and some of the suspect’s blood cells. In the nucleus of each cell in our bodies there is DNA. What is it? DNA is like a necklace made of two twisted strings of pearls. Imagine that these pearls come in four different colours and that thousands of coloured pearls (which make up a gene) are strung in a very specific order. In each individual this order is exactly the same in all the cells in the body: those of the hair roots as well as those of the big toe, those of the liver and those of the stomach or blood. But the order of the pearls varies from one person to another. Given the number of pearls strung in this way, there is very little chance of two people having the same DNA, with the exception of identical twins. Unique to each individual, DNA is thus a sort of genetic identity card.

Geneticists are therefore able to compare the suspect’s genetic identity card (determined from his blood) with that of the person with the red hair. If the genetic card is the same, they will know that the suspect did in fact go near the victim he said he’d never met.

**Just one piece of evidence**

More and more often in cases of sexual assault, murder, theft or other crimes, the police are having genetic analyses done. Why? To try to find evidence of contact between two people, two objects or a person and an object. Proving such contact is often very useful to the investigation. But it does not necessarily provide proof of a crime. It is just one piece of evidence amongst many others

- Anne Versailles

<p><b>We are made up of billions of cells</b></p> <p>Every living thing is made up of lots of cells. A cell is very small indeed. It can also be said to be microscopic because it can only be seen using a microscope which magnifies it many times. Each cell has an outer membrane and a nucleus in which the DNA is found</p>	
<p><b>Genetic what?</b></p> <p>DNA is made up of a number of genes, each consisting of thousands of 'pearls'. Together these genes form the genetic identity card of a person</p>	<p><b>How is the genetic identity card revealed?</b></p> <p>The geneticist takes the few cells from the base of the hairs found on the victim, or from the saliva left on a cigarette end. He puts them into a product which destroys everything around the DNA of the cells. He then does the same things with some cells from the suspect's blood. The DNA is then specially prepared for analysis. After this, it is placed in a special gel and an electric current is passed through the gel. After a few hours this produces stripes similar to a bar code (like the ones on things we buy) which are visible under a special lamp. The bar code of the suspect's DNA is then compared with that of the hairs found on the victim.</p>

Refer to the magazine article given above to answer the questions below

**Question 11:** To explain the structure of DNA, the author talks about a pearl necklace. How do these pearl necklaces vary from one individual to another?

- A. They vary in length.
- B. The order of the pearls is different.
- C. The number of necklaces is different.
- D. The colour of the pearls is different

**Question 12:** What is the purpose of the box headed “How is the genetic identity card revealed”?  
To explain:

- A. what DNA is.
- B. what a bar code is.
- C. how cells are analysed to find the pattern of DNA.
- D. how it can be proved that a crime has been committed.

**Question 13:** What is the author’s main aim?

- A. To warn.
- B. To amuse.
- C. To inform.
- D. To convince.

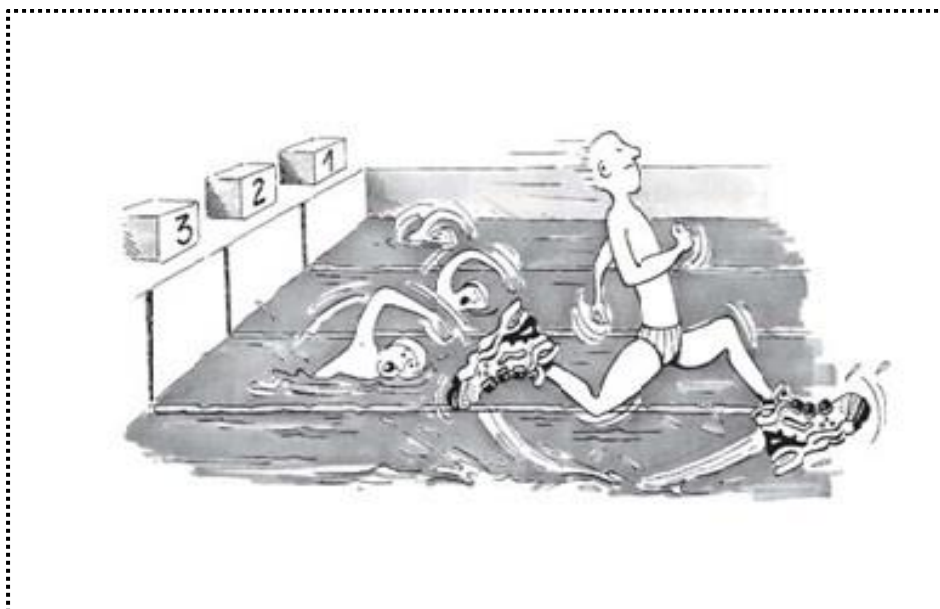
**Question 14:** The end of the introduction (*the first section*) says: “But how to prove it?” According to the passage, investigators try to find an answer to this question by

- A. interrogating witnesses.
- B. carrying out genetic analyses.
- C. interrogating the suspect thoroughly
- D. going over all the results of the investigation again.

#### UNIT 4 : RUNNERS

##### **Feel good in your runners**

For 14 years the Sports Medicine Centre of Lyon (France) has been studying the injuries of young sports players and sports professionals. The study has established that the best course is prevention... and good shoes.



**Knocks, falls, wear and tear...**

Eighteen per cent of sports players aged 8 to 12 already have heel injuries. The cartilage of a footballer’s ankle does not respond well to shocks, and 25% of professionals have discovered for themselves that it is an especially weak point. The cartilage of the delicate knee joint can also be irreparably damaged and if care is not taken right from childhood (10-12 years of age), this can cause premature osteoarthritis. The hip does not escape damage either and, particularly when tired, players run the risk of fractures as a result of falls or collisions.

According to the study, footballers who have been playing for more than ten years have bony outgrowths either on the tibia or on the heel. This is what is known as ‘footballer’s foot’, a deformity caused by shoes with soles and ankle parts that are too flexible.

**Protect, support, stabilize absorb**

If a shoe is too rigid, it restricts movement. If it is too flexible, it increases the risk of injuries and sprains. A good sports shoes should meet four criteria.

Firstly, it must *provide exterior protection*: resisting knocks from the ball or another player, coping with unevenness in the ground, and keeping the foot warm and dry even when it is freezing cold and raining.

It must *support the foot*, and in particular the ankle joint, to avoid sprains, swelling and other problems which may even affect the knee

It must also provide players with good *stability* so that they do not slip on a wet ground or skid on a surface that is too dry.

Finally it must *absorb shocks*, especially those suffered by volleyball and basketball players who are constantly jumping.

**Dry feet**

To avoid minor but painful conditions such as blisters or even splits or athlete’s foot (fungal infections), the shoe must allow evaporation of perspiration and must prevent outside dampness from getting in. The ideal material for this is leather, which can be water-proofed to prevent the shoe from getting soaked the first time it rains.

Use the article to answer the questions below

**Question 15:** What does the author intend to show in this text?

- A. That the quality of many sports shoes has greatly improved.
- B. That it is best not to play football if you are under 12 years of age
- C. That young people are suffering more and more injuries due to their poor physical condition
- D. That it is very important for young sports players to wear good sports shoes.

**Question 16:** According to the article, why should sports shoes not be too rigid?

.....

.....



**Question 17:** One part of the article says, “A good sports shoe should meet four criteria.”

What are these criteria?

.....

.....

.....

.....

**Question 18:** Look at this sentence from near the end of the article. It is presented here in two parts.

“To avoid minor but painful conditions such as blisters or even splits or athlete’s food (fungal infections).....”	(first part)
“... the shoe must allow evaporation of perspiration and must prevent outside dampness from getting in.”	(second part)

What is the relationship between the first and second parts of the sentence?

The second part

- A. contradicts the first part.
- B. repeats the first part
- C. illustrates the problem described in the first part
- D. gives the solution to the problem described in the first part

**UNIT 5: WARRANTY**

**Warranty Text 1**

<b>Camera Shots</b>	Video house 89, ELIZABETH STREET, MELBOURNE 3000 Phone: 9760 9601 Fax: 9602 5527 <a href="http://www.camerashots.com.au">http://www.camerashots.com.au</a> Customer Sarah brown 151 Glenyon Street Brunswick VIC 3057	Camera Shorts Video House 89, Elizabeth Street Melbourne VIC 3000 9760 9601	
		INVOICE : 26802 ACCOUNT : 195927	DATE : 18/10/99 SALES : 24 RAY

Product	Description	Serial Number	List	QTY	NET	Total	Ex
150214	ROLLY FOTONEX 250	30910963		1	249.08	249.08	X
33844	ZOOM TRIPOD			1	5.66	5.66	X
	Transaction..... Amount	Change					
	Visa/Bank Card \$254.74				Sub total	254.74	
					Total	254.74	

Thank you for your business

On the opposite page is the receipt that Sarah received when she bought her new camera. Below is the warranty card for the camera. Use these documents to answer the questions which follow.

**Warranty Text 2**

<p><b>One Year Warranty: (Private Users)</b>  <b>Valid only in Australia</b>  Video House and Company PTY LTD - ACN 008458884 ('Video House') warrants to the initial owner that the camera is free of any defects of workmanship. This warranty is not transferable.</p> <p>Video House will service, repair or replace at its election, and free of charge any part which is found upon inspection by Video House to be defective in material or workmanship during the warranty period(s)</p>
<p>PLEASE PRINT CLEARLY  NO. M 409668</p> <p>Camera – Model: .....</p>
<p>Serial number: .....  Owner Name: Sarah Brown  Address: 151 Glenlone Street  Brunswick West 3057</p> <p>Date purchased: .....  Purchase price: .....</p>
<p style="text-align: center;"><i>Rubber Stamp of Dealer</i></p>
<p>PLEASE NOTE  Post immediately – Postage Stamp Necessary:  This warranty card should be completed and returned to Video House within 10 days of purchase.</p> <p>International Warranty Card issued on request</p>

**Question 19:** Use the details on the receipt to complete the 4 blanks in the warranty card. The name and address of the owner have already been filled in.

**Question 20:** How long does Sarah have to return the warranty card?

.....  
.....

**Question 21:** What else did Sarah buy while she was in the store?

.....  
.....

**Question 22:** The words ‘Thank you for your business’ are printed on the bottom of the receipt. One possible reason for this is simply to be polite. What is another possible reason?

.....  
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