

GRADE 11

HISTORY

UNIT MODULE 1

INTRODUCTION TO PAPUA NEW GUINEA'S EARLY HISTORY

TOPIC 1: INTRODUCTION TO HISTORY

TOPIC 2: PREHISTORY

TOPIC 3: TRADITIONAL TRADE SYSTEMS

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MR. DEMAS TONGOGO
Principal



**Flexible Open and Distance Education
Papua New Guinea**

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SECRETARY'S MESSAGE

Achieving a better future by individual students, their families, communities or the nation as a whole, depends on the curriculum and the way it is delivered.

This course is part and parcel of the prescribed National Curriculum. Its learning outcomes are student centred and written in terms that allow them to be demonstrated, assessed and measured.

It maintains the rationale, goals, aims and principles of the National OBE Curriculum and identifies the knowledge, skills, attitudes and values that students should achieve.

This is a provision of Flexible, Open and Distance Education as an alternative pathway of formal education.

The Course promotes Papua New Guinea values and beliefs which are found in our constitution, Government policies and reports. It is developed in line with the National Education Plan (2005 – 2014) and addresses an increase in the number of school leavers, which has been coupled with a limited access to secondary and higher educational institutions.

Flexible, Open and Distance Education is guided by the Department of Education's Mission which is fivefold;

- to facilitate and promote integral development of every individual
- to develop and encourage an education system which satisfies the requirements of Papua New Guinea and its people
- to establish, preserve, and improve standards of education throughout Papua New Guinea
- to make the benefits of such education available as widely as possible to all of the people
- to make education accessible to the physically, mentally and socially handicapped as well as to those who are educationally disadvantaged

The College is enhanced to provide alternative and comparable path ways for students and adults to complete their education, through one system, many path ways and same learning outcomes.

It is our vision that Papua New Guineans harness all appropriate and affordable technologies to pursue this program.

I commend all those teachers, curriculum writers and instructional designers, who have contributed so much in developing this course.



DR. UKE KOMBRA, PhD
Secretary

COURSE INTRODUCTION

Dear Student,

Welcome to the Grade 11 History Course. This course consists of four modules.

- Module 1: Introduction to Papua New Guinea's Early History
- Module 2: Imperialism
- Module 3: World War I and Its Aftermath
- Module 4: World War II

This unit will basically look at the brief history of Papua New Guinea. Through this study of the history of Papua New Guinea, the students learn of the early beginnings of the formation of New Guinea, and the migration of early ancestors from the Sunda land. They will classify their settlement, organisation and development over time to the arrival of foreigners. This study enables students to acquire knowledge and understanding, historical skills, and values and attitudes to appreciate our History. This study helps us to develop a lifelong interest and enthusiasm about our past, and to prepare us for the future challenges. By doing so, you are informed and also become active citizens in our society.

Assessments

- **Practice Exercises**
Each topic module in each Unit Module has a Practice Exercise for you to do after the Summary. Answers to the Practice Exercises are found at the end of each Topic in the unit.
- **Assignments**
Each Unit has an Assignment booklet which you will send to FODE Provincial Center for marking. The marked Assignment will be returned to you with comments and advice from your tutor. A mark will be given. This mark is counted towards your final mark in the exam.
- **Examinations**
The exams are the same as those given to students studying in Business/Technical Colleges and are held each year in November.

For more information, refer to the **Study Guide**.

STUDY GUIDE

Below are the steps to guide you in your course study.

- Step 1: Carefully read through each module. In most cases, reading through a lesson once is not enough. It helps to read something over several times until you understand it.
- Step 2: There is an instruction below each activity that tells you to check your answers. Turn to the marking guide found at the end of each module, and mark your own written answers against those listed under the **Answers to Activities**. Do each activity and mark your answers before moving on to the next part of the module.
- Step 3: After reading the summary of the unit module, start doing the Practice Exercise. Refer to the module notes. You must do only one practice exercise at a time.
- Step 4: Below each Practice Exercise, there is an instruction that says:

CHECK YOUR WORK. ANSWERS ARE AT THE END OF THE SUB UNIT.

Turn to the marking guide at the end of the topic, and mark your own written answers against those listed under the Answers to Practice Exercises.

- Step 5: When you have completed a practice exercise and marked your answers, go back to the module and correct any mistakes you may have made, before moving on to the next module.
- Step 6: Study the entire module following Steps 1, 2, 3, 4 and 5.

Here is a sample Study Timetable for you to use as a guide. Refer to it as a reminder of your study times.

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-10:00	FODE STUDY TIME				
10:00-11:00					
1:00-2:00					
2:00-4:00					
6:00-7:00					
7:00-9:00	Listen to or watch current affairs programmes. Write your diary, read a book.				

A timetable will help you to remember when you should be doing your FODE studies each day.



Time Frame

This unit should be completed within 10 weeks.

If you set an average of 3 hours per day, you should be able to complete the unit comfortably by the end of the assigned week.

Try to do all the learning activities and compare your answers with the ones provided at the end of the unit. If you do not get a particular exercise right in the first attempt, you should not get discouraged but instead, go back and attempt it again. If you still do not get it right after several attempts then you should seek help from a friend or your tutor. Do not pass any question without solving it first.

Sub unit 11.1 Introduction

History is a specialised subject that requires a high level of English competency. Students need to be fluent in reading, writing and speaking English for research, report writing and oral and written presentations.

History is the study of the past events and happenings. We try to use this knowledge to make better informed decisions so as not to repeat the past. The subject looks at events that took place many years ago that have shaped the world we know today. This study emerges the opportunity for us to acknowledge and appreciate our history and those who have been part of it. There are both good and bad lessons to learn from studying one's history and these experiences can be used as a stepping stone to move on and prosper. With these experiences in mind we continue to study history as a science and a tool to be materialised and used in our lives.

People in all societies have stories to explain how and why things come into existence. Likewise, this study of our local history will enable us to understand how technology, knowledge, and skills changed the lifestyle of the people from nomadic hunter and gathers to a settled way of life.

The study of history is significant also in finding out about the Stone Age and how people lived in other places and the factors that forced them to travel far into the Pacific.

Students will develop the skills and knowledge necessary to help them in their lives. They may make good decisions and learn from those events that helped the world as it is today.

Learning Indicators:

- students will be achieving this outcome when they, for example
- demonstrate an understanding of the diverse and complexity of Papua New Guinea's past societies
- undertake historical inquiry about the prehistory of Papua New Guinea, and communicate findings using oral reports or pictorial presentations
- plan and conduct investigations about the arrival of foreigners in their local area, using appropriate gathering strategies
- collect and interpret information about traditional trade, rituals and initiations from a range of appropriate sources
- construct timelines to illustrate Papua New Guinea's history



Learning Outcomes

The students will be able to:

- identify and understand events, issues and forces that have shaped their cultural, social, political and economic heritage
- demonstrate an understanding of historical concepts and ideologies
- interpret and critique historical evidence and information
- apply the historical skills of inquiry, observation, classification, recording and interpreting historical events and concepts.

Sub unit 11.1.1: The Study of History

Sub topic 11.1.1.1: Introduction to History

Welcome to the first sub topic. In this sub topic, you will look at an introduction of the study of history; and why it is important to study history.

At the end of this topic, the students can:

- define the terms: history and historian
 - explain the work of historians
 - explain the importance of studying history
-

History is the study of the past and people who came before us. It investigates the past in general, but the human past in particular. The world and its people have changed so much that we need to know our past.

These specialised people who study the past are known as historians. They study the distant human past through various sources of evidence, to make justified conclusions. In history, we look at factors and situations that enable evolution to take place at such a time.

History is primarily concerned and fascinated to investigate;

- the way people lived
- how their way of life developed
- how they were thought
- how and why their way of life changed
- how these changes affected them
- how our lives today have been shaped by the people of the past

It is important for us to see history from two folds, and that is through;

- the entire human past as it actually happened
- people's attempt to describe and interpret the past (in history books)

Why is History Important?

Some people say history is boring, or 'not useful'. This is not a balanced view. History is extremely important like other sciences because;

- It helps us to develop powers of critical thinking while weighing evidence and organising information. We are able to imagine what life was like, for those people who did not have the excess of seeking modern medical assistance and advancement in technology.
- We can study the influence of some famous people and their importance. We come to acknowledge people who made remarkable contribution in knowledge and

science. Some of these people are Nelson Mandela of South Africa, Mahatma Ghandi of India, John F. Kennedy of USA, Sir Michael Somare of Papua New Guinea, and great Greek philosophers. They have contributed a lot of values and philosophies that is evident in our daily lives.

- If we are to understand the way we live, think and govern ourselves, we must realise that today's world is the product of the past. Knowing the past can help us to understand ourselves and the present much better. We shall adopt the values and norms of the past experiences and people's ideas to make better decisions for today and tomorrow.
- Knowledge of history is useful for understanding films, TV programs and books set in the past.
- We can use knowledge of the past to help us judge how we should act today. The skills of history can be used in many ways throughout our lives. The ethical values of conducting our daily lives can be learned from the past people and events. We can understand the wonderful creativity of humans in the fields of art, architecture, music and literature. The ancient technology that Egyptians used to develop the Egyptian Pyramid. It was erected without the use of machinery and modern technology.
- We also learn to appreciate and acknowledge the work of individuals down the history who liberated us to the present state. Our people and Australian soldiers fought vigorously for our freedom from the Japanese invasion of the island of New Guinea, is one of the amazing histories that bind us together. These people offered their lives to make this world a better place to live free from all forms of oppression and discrimination. If without them, we may not be where we are, so it is important to count their contributions.
- It is only through history that a society can have the knowledge of itself. A man without memory and self-knowledge is a man adrift, so as a society without memory. It is history that shapes the world in general and Papua New Guinea came through a rough road in history to reach the present. It is history that caused Australia to look after Papua New Guinea and introduced a new type of government system that we use today. Today, it is history that shapes and surrounds us in our everyday lives.
- We study history to find out about our past and our origin. Many scientists have carried out studies establishing dates and groupings of the different peoples of the world. Today we are tracing our origin by using the knowledge provided by these specialised people. They had carried out an intensive study to give us a glimpse of our past and the different stages of development humans have passed through to the present.

We need to know our past well, in order to understand the problems that we persistently face today. The stages of development depicts the past to the present. It also presents the different stages of life that we have evolved.

By studying history we are able to explain and make an analysis of our country's current social and political issues. History helps us to understand our socio-economic and political issues affecting our country and be in a position to make better decisions. As an intelligent generation we can use the knowledge of our past to correct our mistakes. The Westminster systems of governance was introduced to Papua New Guinea therefore if we know our history well we can make informed decisions to amend any forms of chaos in our government.

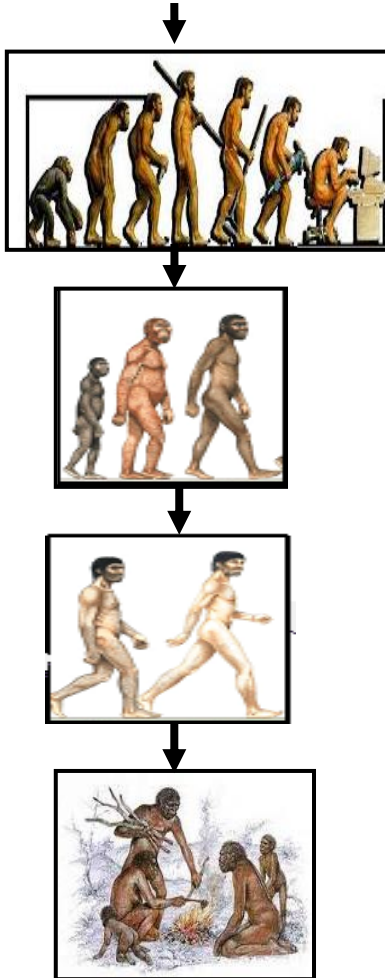
Early hominids to Homosapiens**Gardening and settled lifestyle****Westernisation and modern lifestyle**

Illustration 11.1.1.1a: Stages of development for humans

Studying of history enables us to develop useful skills and make informed judgments about our society today. It enables people to come to appreciate where they live, through their association with the environment and people from local, regional, national and international communities. The study of history further enables us to understand the rise and fall of civilisations. This information helps us to clearly understand the human behaviour and how societies function, change, develop and continue over time.

History is the study of the past and it is concerned with the human past in particular and the stages of development that they have passed through. The primary purpose of studying history is the people and their origin. We have people who study the past known as historians. They study the distant human past through various sources of evidence to make a concrete conclusion. The archaeological evidences also help the historians to confirm that humans have lived in our part of the world for about 50, 000 years.

We have to know how people have survived. There are many things made by human beings (such as pots made from clay, tools shaped from stone, bone and shell) that have survived from the past to the present day. Many of these past materials and tools survived because they were buried in the soil. Many scientists have carried out enormous studies to give dates and groupings. Today we are tracing our origin by using the knowledge provided by these groups of

people. Their study and work is important to us to understand and appreciate the movement and origins of our ancestors.

With this idea, we have to embrace the study of history, make it interesting and develop the talents to carry out an in-depth study of the past. The western ideas of governance and management skills used currently cannot work out well for our country. In such situations we have to impart practices of our Melanesian cultures. For instance, at the traditional level the chiefs and headmen are decision makers therefore such values can only be practised if we know our history and customs. That is why history is worth studying so that we can practice its values in our everyday lives.

Now read the summary.

Topic Summary

- History is the study of the past.
- Studying history is important because it helps us learn about our past mistakes so that we can make better decisions in the future.
- Studying of history enables us to develop useful skills and make informed judgments about our society today.
- Historical study is concerned with the human past and the stages of development that humans have passed through.
- An historian's work is to study the past through evidences gathered to make informed judgements about how people have lived in the past.

Now do Activity.



Activity 11.1.1.1

1. Briefly define and explain what the study of history is basically concerned about. Why?

Check your answers at the end of subunit 11.1.1

Sub topic 11.1.1.2: Historical Terminologies

In the last topic, you looked at an introduction to the study of history, and the importance of studying history. In this topic, you will define and discuss the different historical terminologies used in the study of history.

By the end of this topic, the students can:

- define archaeology, anthropology, linguistics, botany, zoology, biology and palaeontology
- use these terminologies in discussing the study of history

In order to study history we have to master the terminologies and various fields of study that contribute enormously in writing and drafting the histories as we see and study. We, not only use one piece of study such as archaeological evidence alone to confirm a theory or discovery. In order to prove a theory we have to seek several evidences which then confirm a theory from one's own investigations.

These terminologies are inter-related as far as the study of the past is concerned. Each of these fields of studies is concerned with remains of the past as historical evidence. These scientists provide very useful information about the past; concerning people, animals and plants that lived on earth many years back. Without their background information historians cannot provide a reliable knowledge about the past.

Archaeology is the study of the remains of the past from the deepest prehistory to the recent past. The work of an archaeologist is centered on the discovery of material evidence, such as pottery, stone tools, animal bone, and remains of structures; and carry out testing to date them to its origins. These scientists are called archaeologists. It is the study of human activity in the past, primarily through the recovery and analysis of the material culture and environmental wastes that were left behind. The scientist or archaeologist studies past remains and carry out a radio-carbon dating to provide accurate dating systems. It includes artefacts, architecture, bio facts and cultural landscapes which existed thousands of years such as Kuk Drainage evidences of Waghi Valley.

Archaeology can be considered to be both a science and humanity studies as it is connected with the work of anthropologists. These two areas of studies work together hand in hand and inter-relate information. The most common experts in history is historians and archaeologists. They are more or less like detectives who collect pieces of information and put them together for future consumption. Historians write the history books after thorough analysis of the archaeological findings.

Archaeologists dig in the ground and unearth the history. They have to do this very carefully and scientifically if they are going to make any sense of the few things that remain there. They call the layers of earth they excavate or dig 'strata'. Many interesting things or remnants from the past are found in these layers. These may be big things like the remains of houses or may be tiny things like seeds. Archaeologists examine everything that remains and they apply three methods to put dates on the things they discover.

- (i) The method of time-makers only applies to some of the objects whose dates are already known through the previous discovery. For example, in the case of a pottery discovery we go ahead and give the same dating as the previous dating used.
- (ii) The second method is to study the 'Layers of Soil' or strata. They study the layers of the soil and how it has accumulated to cover up the objects.
- (iii) The third and most efficient method is the 'radio-carbon dating systems' which is widely used today. This is a scientific method and it can give accurate dates to remains like bones, objects and remains of organic materials.

Anthropology is the study of humans, past and present, which draws and builds upon knowledge from the social and biological sciences. This study enables us to understand the complexity of cultures across all of human history. Anthropologists are scientists who study behaviors, cultures, origins, physical features, past remains, and language types. They provide useful information to historians in their work.

Generally, anthropology is concerned with cultures of the people and their inter-relationships with the environment and other people. This study investigates the behaviour of the people and how they have responded and used their environment. It analyses the different cultural practices, rituals, magic and generally behaviours.

Linguistics is the study of the different language groups. It seeks to understand the processes of human communications, verbal and non-verbal, and variation in language across time and space. Linguists are people who study language and its distinct features. They make comparison with similar language groups and connection with its origins. They also study the social uses of language, and the relationship between language and culture.

Botany is also called plant science or plant biology. It is the science of plant life and a branch of biology. A botanist is a scientist who specialises in botany. The term "botany" comes from the Ancient Greek word *botane* meaning pasture, grass. Traditionally, botany also included the study of fungi and algae. This study helps us to make comparison and investigate the ancient plant life transitions.

Zoology is the study of animal kingdom, including the structure, evolution, classification, habits, and distribution of all animals, both living and extinct. A Zoologist is a person who studies the animal species and their behaviours. The study of zoology helps us to identify the movement of animal species and its overall developmental changes.

Biology is a natural science concerned with the study of life and living organisms, including their structure, function, growth, evolution, and distribution. Biologists are people who study the living things including their behavior and species categories. The study of biology in history helps us to compare the remains of the pre-historic living organisms that have gone through many stages of evolution. These fields of knowledge continue to give us additional information on how plants and life has changed over time to the present stage.

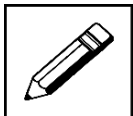
Paleontology is the study of fossil remains of animals and plant life of past geological periods. Paleontologists study the process of life existent or very old remains of structures. It includes the study of fossils to determine human, organisms' evolution and interactions with each other and their environments.

Now read the summary.

Topic Summary

- Historical terminologies are inter-related.
- Each historical field of study is concerned with remains of the past as the historical evidences.
- Archaeologists use a scientific method called radio carbon dating to give accurate dates to remains of bones, objects and organic materials.
- Anthropology is a field of study that investigates the behaviour of the people and how they respond and use their environment.
- Linguistic is the study of the different language groups.
- Botany is the study of fungi and algae that helps us to make comparison and investigate the ancient plant life transitions.
- Zoology is the study of animal kingdom.
- Biology is the study of life and living things.
- Paleontology is the study of fossil remains of animals and plant life of past geological periods.

Now do Activity.



Activity 11.1.1.2

-
1. How does study of linguistic and anthropology relate to the work of historians?

2. What is a scientist who studies animal population called?

3. How do the study of Zoology and Biology relate to the study of history? Briefly explain.

4. Name the five specialised areas that historians collect their information to write a history.

Check your answers at the end of subunit 11.1.1

Sub topic 11.1.1.3: Oral History and Traditions

In the previous topic, you looked at historical terminologies in the study of the past. There are different studies that help historians and archaeologists make informed judgments about the past. In this topic, you will look at Oral history and traditions of Papua New Guinea.

By the end of this topic, the students can:

- define oral history, traditions, primary sources and secondary sources
- identify examples of primary sources and secondary sources
- explain how historians use sources
- state the methods by archaeologists use to put dates on they things

Our people in the past were primitive. They never had any form of writing practiced though they were skilled in design and craft. These early people had the skills of painting faces and other decorations during special ceremonies. Most of their stories were passed on from generation to generation. The fathers taught their sons the risks and their enemy lines. There were no written guidelines so these early people used their instincts to follow simple rules in their everyday lives.

The values of conduct for the community and society were passed on. The young adolescents were introduced these norms and systems or the expected principles to be strictly followed by each member of the tribe. For instance, in the highlands the fathers transfer the information about their tribal enemies some ten to twenty generations ago to their sons. There is no written record for the future generation and so it was extremely important to pass-on this significant information.

Oral history is the spoken history. The word, *oral* means spoken to and related to one another. Oral history includes stories, songs, practices, beliefs, magic, rituals, customs & traditions and legends about our people and their environment. These beliefs and stories have been passed on for many generations. This type of history is passed on from generation to generation which might not be accurate information after many centuries. In the process of transmitting to one another some information can be left out or misinterpreted. In order to avoid these risks, historians use more than one sources of evidence to prove that an event took place. However, it is essential to have a broad knowledge of spoken history about our people and their surroundings.

Oral history is centered on our traditions. It explains the way certain things are being performed and practiced by people. Traditional values of customs and beliefs are distinct and diverse. The traditions of the coastal people are quite different from the highlanders. Traditions are also being passed on from generation to generation. The knowledge about building a 'Sepik Haus Tambaran' is being passed on for many generations. The highlander's traditional way of cooking 'mumu' is being practiced and handed down to the present. The traditional ceremonial exchange 'moka' continue to exist today. This is what we basically mean by oral traditions.

The diagram below shows how knowledge and skills were passed on from one generation to the next.

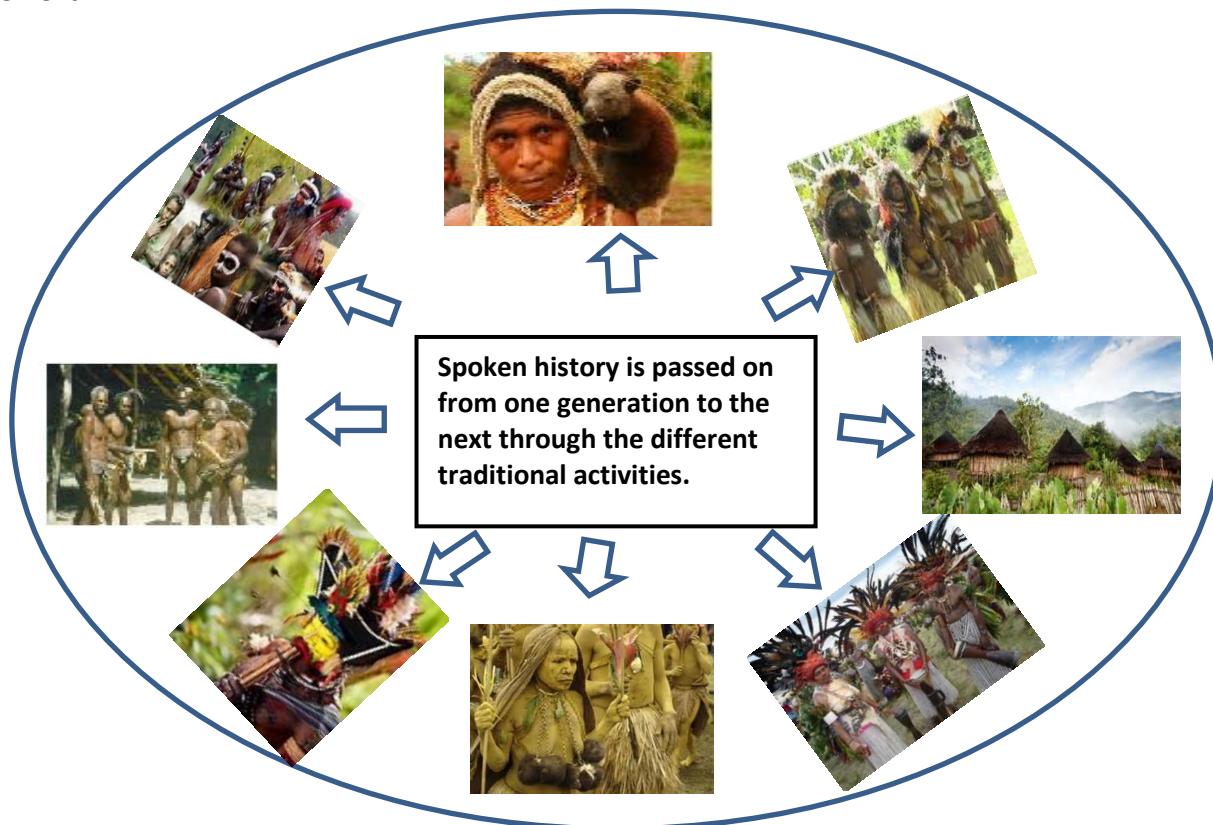
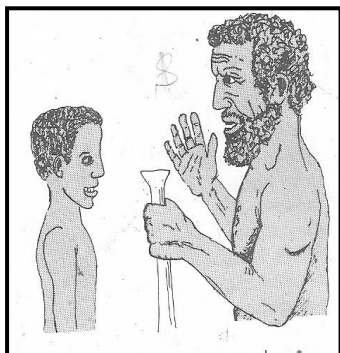


Illustration 11.1.1.3a: Passing down of oral traditions

Historians study the past in many ways. Sometimes they use written records such as newspapers, reports, letters, and cave paintings. Similarly, other aspects of history like stories, songs, and legends also provide useful information. Historians try to find out more than one source of evidence to prove that an event took place. They act like detectives and collect as many evidences provided by scientists and specialist people from different fields of studies.

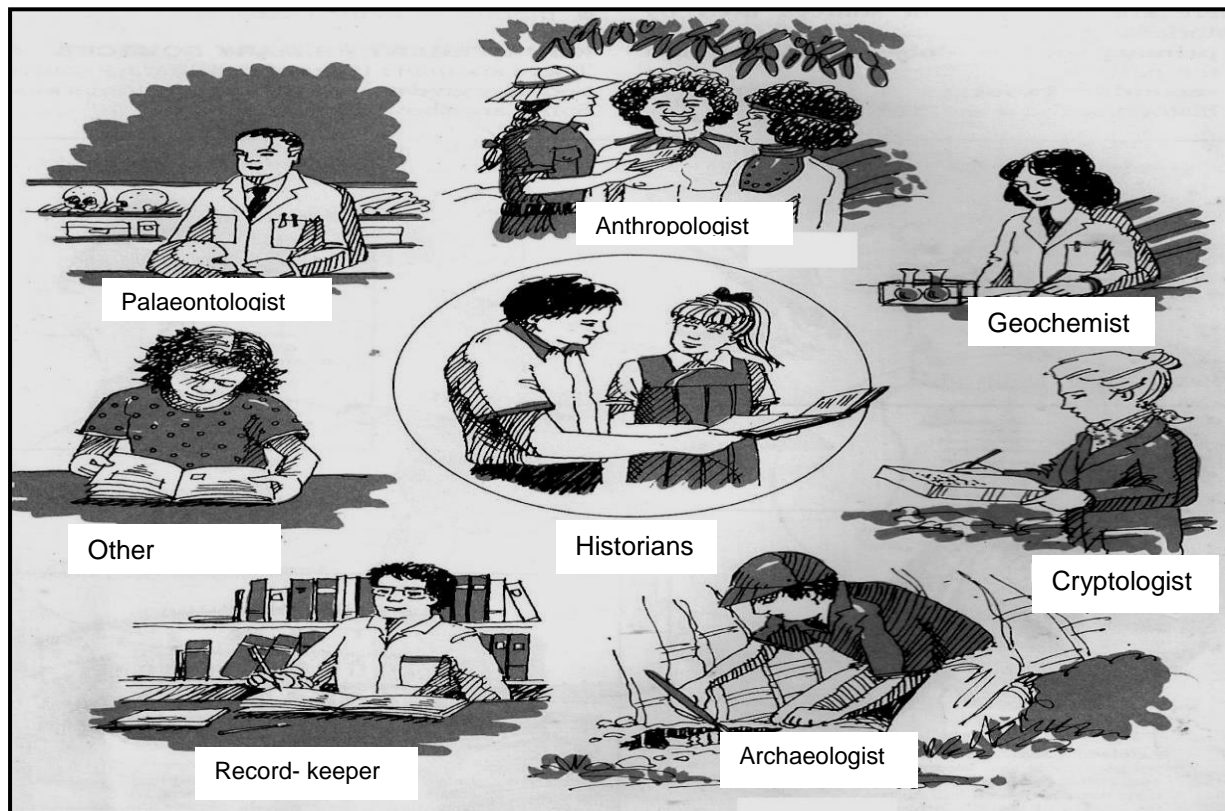
Some songs contained stories about the history of the group. Most societies had stories describing how people first came to their area. There were also stories describing the origin of plants and animals, migration, kinship and warfare. These stories handed down from one generation to the next are known as oral history.

Talking to Old People



These stories were told by adults to children who did not question whether they were true or false. The listeners accepted as fact the account of events that had taken place in the past either in the village of the living or the place of the dead. In some societies men build spirit houses known as *haus tambaran* (in the Sepik River community) in which women and children were not allowed in. Men guarded this house and kept secret musical instruments associated with magical practices. Traditionally people believed in many different spirits and also sought assistance while in need of divine intervention.

Below is a diagram showing sources of information that help historians from their work.



In order to develop a theory, historians collect different sources of information as shown above. They investigate and compare sources to come up with a final conclusion. It is not a one sided source of information being put together into a history book. Instead, various field specialists provide concrete evidence to prove the theories of certain events in human history. It concerns the movement of people, their technology, and their stages of changes until the present. These scientists have made a tremendous contribution in shaping valuable information that we should know about our origin.

Historians have divided the historical evidence into two groups known as primary and secondary sources of evidence.

Primary sources of evidences are original sources of information that is kept for a long time. Such information includes old documents, coins, photographs, artifacts, objects and records which have come down to us direct from the past. These are actual pieces of original history including diaries, letters, historic sites like Kokoda Track, and bones of people in the past. Such evidences are items straight from the past that are seen as concrete evidence.

We make a further breakup of the primary evidences into non-literary and literary sources of evidence. Though they are both seen as primary sources however this distinction is done to classify them into hard objects and written records. We can divide primary sources into two kinds:

- non- literary are mainly objects
- literary are written records

LITERARY AND NON-LITERARY SOURCES OF EVIDENCES



Skeletons, bones, skulls, teeth of people and animals



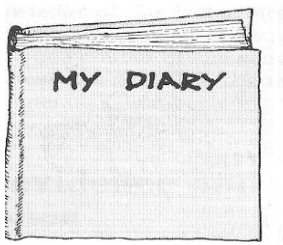
Large structures: houses, temples, roads, bridges, tombs, forts, irrigation works, canals.



Photos, art work: paintings, mosaics, sculptures.



Artifacts (small objects made by people): tools and weapons, pottery and metal containers, household items, tin statues, jewelry coins, fragments of cloths,



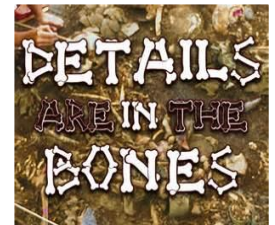
Dairies, plays, stories, and poems



Birth certificates, official records, laws, rules,



Inscription on coins, and other household goods



Inscription on clay tablets, graffiti on walls

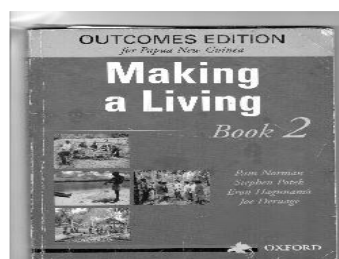
Primary sources in the form of writing include printed books, manuscripts, letters, maps, newspapers. Other primary sources of evidences include objects and sites, human skull, stone tools, pottery buried in the ground which becomes `primary archaeological evidence. For examples, the Kuk drainage ditches are archaeological primary evidence found in the Waghi Valley of the Western Highlands Province.

Secondary sources are second-hand evidence. That is, someone else's interpretation of the primary evidence. Secondary sources are the finish product of the primary evidence such as the history books written by historians. Researchers finish their work on the primary sources and they write up their findings, interpret and summarise them in archaeological reports and history books. Secondary sources are one step removed from actual historical sources and for this reason it is called secondary sources. Historians try to use primary sources as much as possible to make their personal judgments about history.

Below are examples of secondary sources of evidence.



Newspapers



Text books



Talking to people

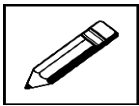
The secondary sources are someone else's interpretation of the actual events of the primary source of evidence. It is also seen as reported information from the eye witness. For example, our daily newspapers report by information collected from primary sources to publish for public consumption. To be fair, historians use both the secondary and primary sources of evidence.

Now read the summary.

Topic Summary

- Oral traditions refer to traditions by word of mouth.
- Oral traditions are passed down from generation to generation and include songs, stories, and poems.
- Primary sources of evidence are the original types.
- Secondary sources of evidence are second-hand information.
- Secondary sources also seen as reported information from the eye witness

Now do Activity.



Activity 11.1.1.3

1. Define 'oral history'.

2.

(a) What is the main difference between primary and secondary evidences?

(b) List two primary and secondary sources of evidence.

Primary

(i) _____

(ii) _____

Secondary

(i) _____

(ii) _____

3. Why do historians use more than one sources of evidence to write up a history.

4. Differentiate between literary and non-literary sources of evidences.

5. How is the knowledge of history applicable to our daily lives?

6. Name three types of oral history discussed in this topic.

(a) _____

(b) _____

(c) _____

Check your answers at the end of subunit 11.1.1

Sub topic 11.1.1. 4: Time Scale

In the last topic, you looked at Oral History, and its importance in the study of history. In this topic, you will look at Timescale, and why it is important in the study of history. Timescale help explain past events in a chronological order.

By the end of this topic, you should be able to:

- define a timescale
- briefly explain the importance of timescale is the study of history
- identify the different timescales used in studying the past
- draw a timeline of historical events

Timescale is an arrangement of events used as a measure of duration of a period of history, geologic or cosmic time.

As we study history, it is essential to master the timescales to understand and analyse how long ago the events described happened, and how they occurred in relation to each other. When we study events that took place some millions of years, we use timescales to comprehend and make connections to give meaning and relatively connect those events together to give us a better understanding.

It is important to know the dating and time scales well in order to understand the past and the present events. The dating or timescales tell us where we are, in relation to the past and the future.

Let us now look at a few most commonly used terms in a timescale.

- *Millennium* is in a period of a thousand years. It is linked with historical dating systems to indicate the happenings in the distant past thousand years ago. This means that in every thousand years this event has taken place.
- *Century* is equivalent to one hundred years or successive periods of 100 years especially from the assumed date of the birth of Jesus. This means that a century is equivalent to one hundred years on the Christian calendar. In history we describe the existence of an archaeological discovery for at least two to three centuries. It is one hundred (of anything).
- *Decade* is a period of ten years: a period of ten years beginning with a year whose last digit is zero. In the past our people's life expectancy was between 4 to 5 decades which is unlike today.
- *Circa* is a Latin word meaning *around* or *about* which is usually abbreviated c., ca or ca. (also circ. or cca.) and means "approximately" as the exact date is not known. It is an approximate date or an estimate date normally used by historians when an event's date or archaeological evidence date is not accurately known.

Given below are a few examples.

- a. 1732 to 1799, both years are known precisely.
- b. c.1732 to 1799, only the end year is known accurately and the starting year is approximate.
- c. 1732 to c.1799, only the starting year is known accurately and the end year is approximate.
- d. c. 1732, c. 1799; both years is approximate.

The Cosmic calendar

A cosmic calendar is like a chart that shows people how long the earth existed and man came to live. This calendar draws us to imagine that the history of the universe happened in one year. The very beginning of the universe is imagined to have happened on the first minute of January 1st, and the present day is on the last second of the last day which is December 31st.

Here is an example of a cosmic calendar. Study it carefully.

• The Big Bang	January	1
• Origin of the solar system	September	9
• Formation of the earth	September	14
• Formation of the oldest rocks known on earth	October	2
• Date of oldest fossils (bacteria and blue-green algae)	October	2
• Oldest fossils photosynthetic plants	November	12
• Reptiles and dinosaurs appear	December	25
• Flowers and mammals appear	December	28
• Homo Sapiens	December	31

Scientists are able to date events in the very remote past – millions of years ago fairly and accurately.

December 31st in the Cosmic Calendar

This is the last important minute the 31st December, where we come to realise the coming into existence of many events. Apparently this approach was used to make these events to have happened just in one minute. The cosmic calendar enables us to imagine what it would be like if the whole history of the universe were condensed into one imaginary year. It is in a way to understand that the very beginning of the universe is imagined to have happened on the first minute of January 1st as such the present day is on the last second of the last day – December 31st day.

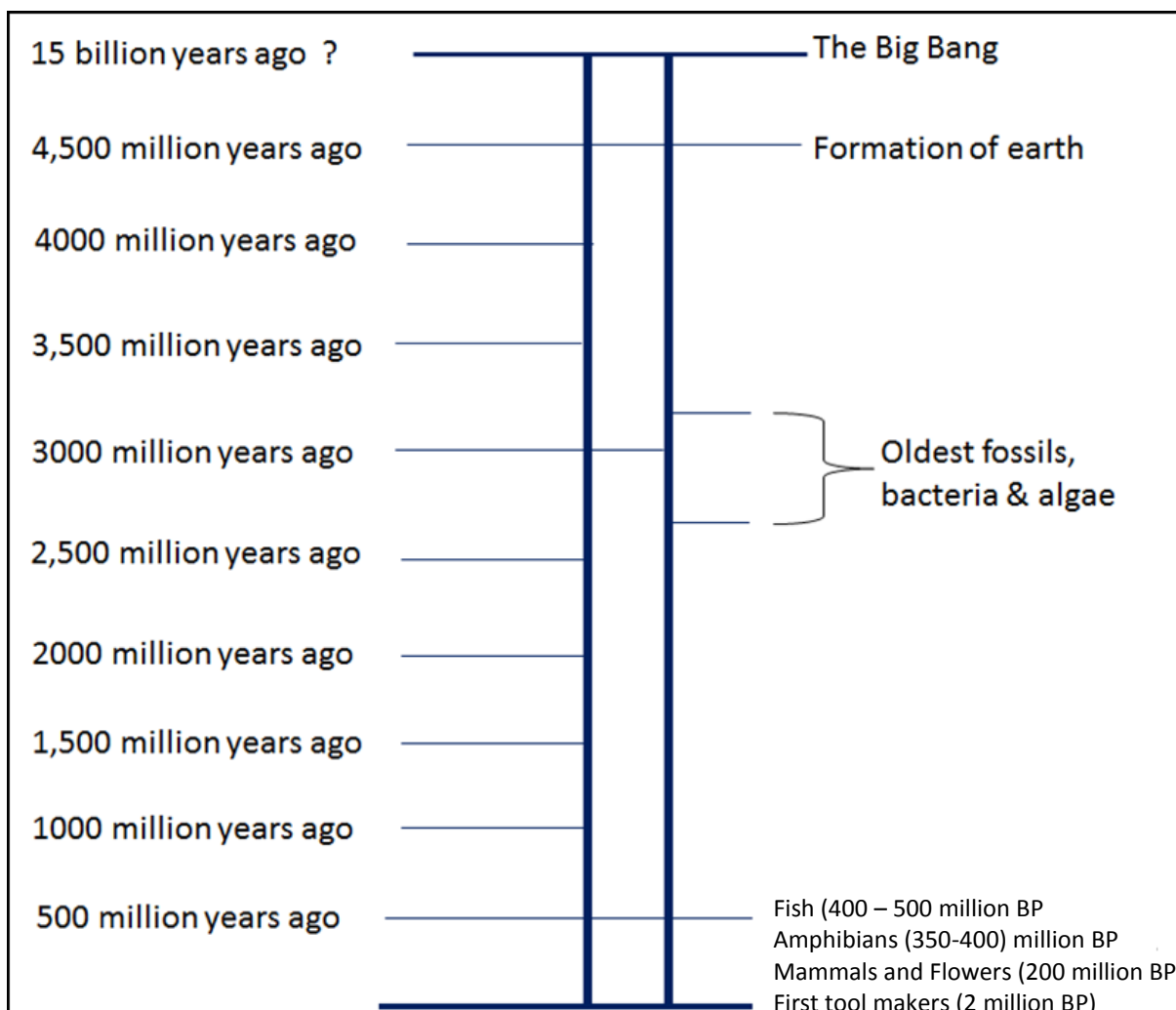
Now, turn the page to study an example on cosmic calendar and timeline.

Cosmic Calendar

- Hominids (ancestors of Homo sapiens)..... 01 : 30 pm
- First Use of Tools..... 10 : 30 pm
- Homo sapiens..... 11: 52 pm
- Settlers in Papua New Guinea and Australia..... 11: 58 pm
- Invention of Agriculture..... 11: 59 : 20ss
- First cities, plough, bronze, wheel 11: 59 : 49ss
- Hammurabi legal codes in Babylon..... 11: 59 : 52ss
- Iron discovered..... 11: 59 : 54ss
- Ancient Greek Scientists..... 11: 59 : 55ss
- Birth of Christ..... 11: 59 : 56ss
- Fall of the Roman Empire..... 11: 59 : 57ss
- Golden Age of Islam..... 11: 59 : 58ss
- The Renaissance in Europe..... 11: 59 : 59ss
- Wide spread development of Science and Technology..... now

Timelines

Just like cosmic calendar, timelines help us to understand how long ago things happened, and how different events in the past related to each other. Important events can be shown on a timeline as displayed below.



You can compare this timeline with the cosmic calendar and see how the same information is presented in two different ways. Timelines present brief information unlike the comic calendar that presents all the information that cannot be accommodated on a timeline.

Dating Systems

Different people use different dating systems. Christians are most familiar with the Christian dating system called the 'B.C and A.D' dates. Remember here that not everyone around the world uses the same dating systems. The Muslims use a system that dates back from the year when Mohammed journeyed to Mecca in A. D. 632.

The A.D and B.C system is used in Christian countries and denotes how many years it is since the birth of Christ to the present day. The Letter A.D stands for "Anno Domini" which means the 'In the Year of our Lord in the Latin. This dating system tells us that it is now nearly two thousand years since Jesus Christ lived. The year when Christ was born is A.D 0 in this dating system.

This dating system is demonstrated by the timeline here.

Key Dates

- 50 000 BP - People settled on the island of New Guinea.
- 30 000 BP - People settled on the land of New Britain and New Ireland.
- 21 000 BP - People settled on Manus Island in a journey regarded as the oldest known voyage anywhere in the world.
- 9 000 BP - People developed agriculture in the highlands.
- 5 800 BP - Betelnut was introduced to New Guinea. Trade in Bird of Paradise skins. Trade of items between Asia and island of New Guinea
- 3 500 BP - Lapita pottery arrived on north coast of the main island of New Guinea.
- 400 BP - The introduction of sweet potato led to increase population in the Highlands

Before Present (BP) years is a time scale used mainly in geology and other scientific disciplines to specify when events in the past occurred.

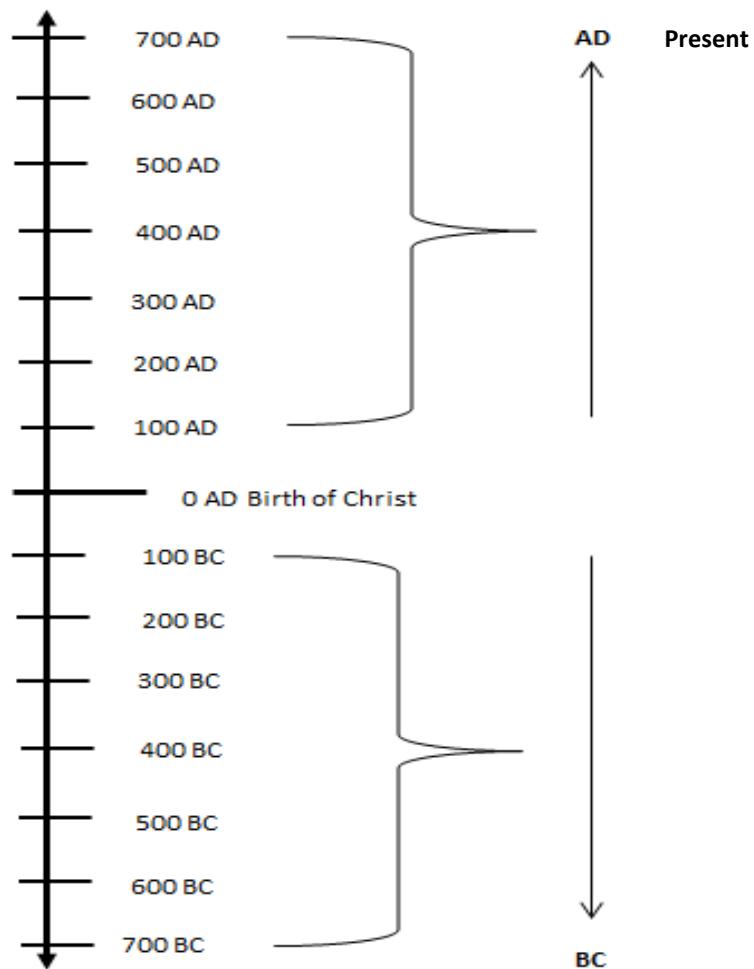
The initials BP (or bp) when placed after a number (as in 2500 BP) means "years Before the Present". Archaeologist generally uses this to refer to dates that were obtained through the radiocarbon dating technology.

Events that happened before Christ was born are said to have happened in the 'B.C.' which stands for 'Before Christ'. In this kind of dating system, an event which happened ten years before Christ was born is said to have happened in the year 10 B.C.

This timeline is divided into sections and here we are using thousands of years. You will realise that the BC dates back towards the opposite direction to the A.D dates. For the A.D dates, you will realise that from the Birth of Christ starting 0 A.D, we are travelling towards the 2000 A.D present day. With the B.C dating systems, we are moving backwards unlike the A.D dates we are moving forward until the present time.

Timeline Demonstrating BC from AD

Scale: 1cm = 100 years



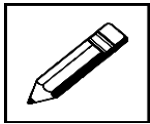
We are studying the past history; therefore, it is important to take note of what the initial dating system A.D and B.C stands for and how or where to place them on a timeline. These dating systems are used to enable us understand the historical events critically.

Now read the summary.

Topic Summary

- Timescale is an arrangement of events used as a measure of duration of a period of history, geologic or cosmic time.
- It is important to know the dating and time scales in order to understand the past and the present events.
- A cosmic calendar is a chart that shows people how long the earth has existed and man came to live.
- A timeline help us to understand how long ago things happened, and how different events in the past related to each other.

Now do Activity.



Activity 11.1.1.4

1. What is a timescale? Briefly explain.

2. What do the initials 'BP' stands for? Which social scientist uses this system when referring to dates taken from radiocarbon dating?

3. What does B.C and A.D stand for in a timeline? Give a brief explanation for each.

4. Complete the timeline below by indicating the B.C and A.D dating system. Use arrows also to show the direction of time to present.



5. Discuss the significance of timelines for the study of history.

6. Briefly differentiate between millennium, century, and decade.

Millennium

Century

Decade

7. Briefly explain why it is important to learn about timescale in the study of history?

Check your answers at the end of subunit 11.1.1



Student Learning Activity Answers for 11.1.1

Activity 11.1.1.1

1. History is the study of the past and is basically concerned with the development of the human past. This is because it is the people that are the ones that make and create history (to happen).
2. (a) history (b) knowledge (c) world (d) Australia (e) Papua New Guinea - (f) everyday
3. A historian is the scientist who studies the past, people and their remains.
4. We acknowledge their contribution and sacrifices. We use their values and contributions in our daily operation and living.
5. This answer will vary due to different student responses.

Activity 11.1.1.2

1. Linguistic is the study of different language groups and its social uses. Anthropology is the study of culture and behaviours of people. These studies provide very useful information about the past; people cultures, types of languages, politics and their social structures.
2. Zoologist
3. Biology is a natural science concerned with the study of life and living organisms, including their structure, function, growth, evolution, and distribution. While zoology is the study of animal kingdom, including the structure, evolution, classification, habits, and distribution of all animals, both living and extinct. The study of Zoology and Biology including other fields of study help scientists and historians to identify the past animal creatures and features of living organisms. The main objective is the evolution or development stages where history is concerned and compare with the present creatures.
4. Archaeology, Anthropology, Paleontology, Record keeper, Cryptologist

Activity 11.1.1.3

1. Oral history is the spoken ideas, stories, songs and poems, passed on from generation to generation.
2.
 - (a) Primary evidence is the original source whereas the secondary evidence is the interpretation of the primary source of evidence by someone else.
 - (b)

Primary Sources

- (i) Lapita pottery
- (ii) Human skull

Secondary sources

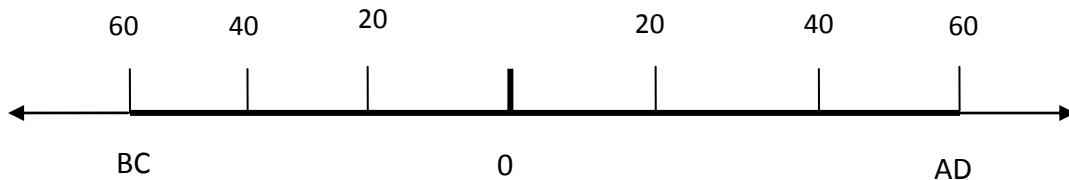
- (i) Text books

(ii) Talking to old people

3. To give an accurate and proved evidence of an account, happenings, events and remains of the past.
4. Literary sources are mainly objects and non-literary sources are written records of evidence.
5. We use the knowledge of the past to organise our lives better and do not repeat the same mistakes of the past again. The values and knowledge of the past is used to organise our socio-economic and political structures to live.
6. Oral history
 - Legends (origin of clan and tribe stories)
 - Story (traditional rules and laws)
 - Rituals/magic and rites and believe in the spirits

Activity 11.1.1.4

1. Timescale is an arrangement of events used as a measure of duration of a period of history, geologic or cosmic time.
2. The initials BP (or bp) stand for “years Before the Present”. Archaeologists generally use this to refer to dates that were obtained through the radiocarbon dating technology.
3. B.C stands for Before Christ and A.D stands for Anno Domini in Latin the year of the Lord. We use a Christian timeline and our date begins with the birth of Jesus Christ about 2000 years ago.
4. Timeline



5. Timelines are used in history to help us easily identify the dates of special and important events in history. The timescales tell us where we are in relation to the past and the future.
6. Millennium is a period of 1000 years
Century is a period of 100 years
Decade is a period of 10 years
7. When studying history, it is important to learn the timescales to help us understand and analyse how long ago the events described happened, and how they occurred in relation to each other. When we study events that took place millions of years, we use timescales to comprehend and make connections to give meaning and relatively connect those events together to give us a better understanding.

It is important to know the dating and time scales well in order to understand the past and the present events. The dating or timescales tell us where we are, in relation to the past and the future.

Sub unit 11.1.2: Prehistory

Sub topic 11.1.2.1: Sahul and Sunda land masses

Welcome. This is the first topic of sub unit 11.1.2. In the last topic, you looked at Timescales and its importance when studying man's historical past. In this topic, you will look at the formation of Papua New Guinea's physical land mass millions of years ago; and the impact of the Ice Age.

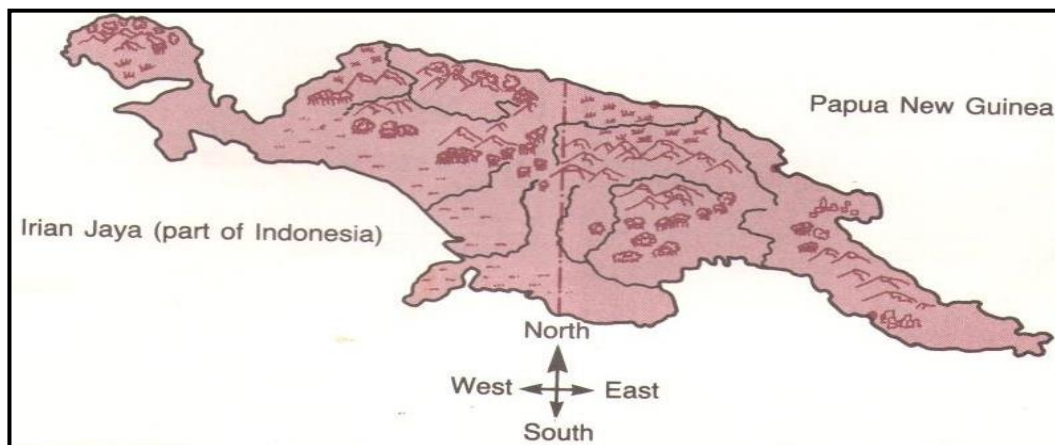
By the end of this sub topic, the students should be able to:

- Identify and differentiate between the Sunda and Sahul land masses
 - Link how the Ice Age was important to the early migrations
 - Discuss and explain the formation of the island of New Guinea and Australia
-

Where did the island of New Guinea come from? The island of New Guinea is the second largest island in the world. Papua New Guinea is the eastern half of this island with archipelagoes and many islands. West Papua formerly Irian Jaya, which is part of Indonesia, is the western half of this island.

Look at the map below showing the island of New Guinea.

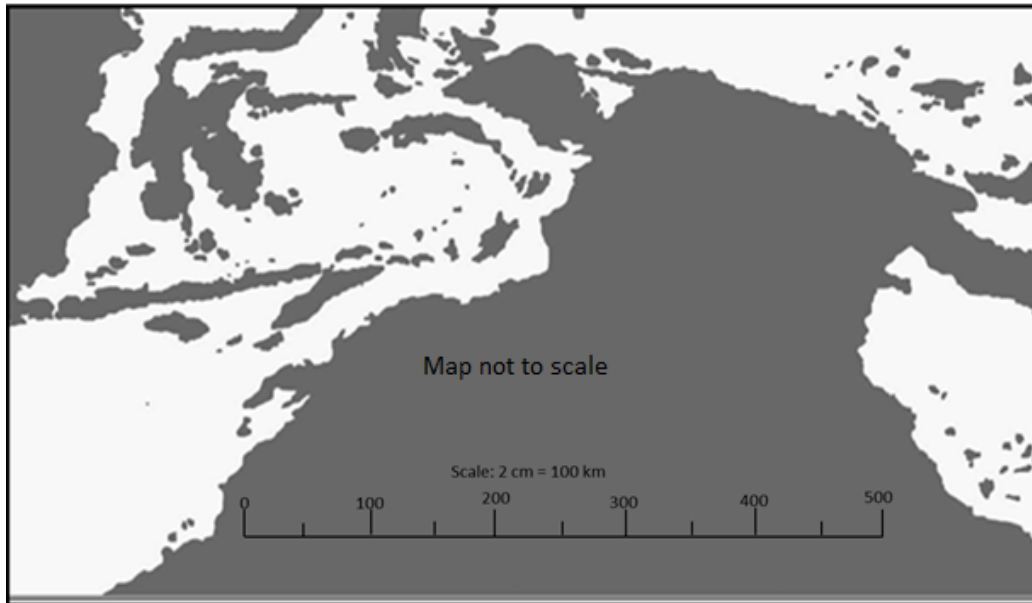
WEST PAPUA (IRIAN JAYA) AND PAPUA NEW GUINEA



During the period of ice age the island of New Guinea was one land mass with the continent of Australia and South East Asia. As the earth became warmer, the ice caps melted and eventually the island of New Guinea took its present shape.

Now, turn the page to look at Southeast Asia during the Ice Age.

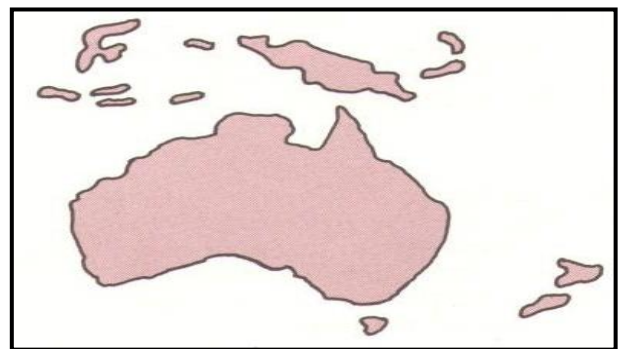
SOUTH – EAST ASIA DURING THE LAST ICE AGE



Geologists are the people who study the earth and its formation. They believe that the earth is about 4, 500 million years old. They have confirmed that the island of New Guinea is about 25 million years old.

During this period, the island of New Guinea was just a small number of volcanoes which were slowly pushed out of the sea. The volcanoes continue to erupt for about 12 million years causing more land to come out of the sea. About 13 million years ago, Papua New Guinea began to get its present shape. Look at the diagram below to see how the island of New Guinea came to be.

HOW THE ISLAND OF NEW GUINEA WAS FORMED



Historians of all times give dates for all events and also try to say when, how and why something happened. Many historians have worked on written and printed records and they have given exact dates for things that happened some years ago. Archaeologists rely on the assistance of many branches of sciences in trying to understand the things that they dig up buried for thousands of years ago.

The land we call Papua New Guinea came into being over a period of hundreds of millions of years. The mountain that forms the backbone of the main island of New Guinea was formed

about 5 million years ago. You can refer back to your grades 7 to 10 notes on how mountains are formed through the movements of the plates. These movements created the environment in which we live today.

SAHUL LAND



The earth's climate has changed over a long period of time. There was a time when it was much colder than it is today. About 3 million years ago it became so cold that a lot of water in the sea was frozen. As a lot of ice formed on the land it eventually caused the sea level to fall dramatically. The land that was once covered by sea then begins to dry up as a result. During this cold period Australia and New Guinea were joined together in one land mass called the Sahul.

Over 60 thousand years ago what is now the island of New Guinea was attached to what is now the continent of Australia. During this period the sea levels throughout the world were sometimes lower than they are today and sometimes higher. They were sometimes higher when the earth warmed up and the ice caps around the regions of the North Pole and South Pole also melted. Water melted from the ice and filled the ocean causing it to rise. On the other hand, sea levels fell during long periods of great cold and the ice caps expanded. In such a climate the icebergs connected the landmass together. This made it possible for early people to cross over easily.

When humans first ventured out of Africa about 60,000 years ago, they left genetic footprints still visible today. By mapping the appearance and frequency of genetic markers in modern peoples, we create a picture of when and where ancient humans moved around the world. These great migrations eventually led the descendants of a small group of Africans to occupy even the farthest places of the Earth.

It is believed that Africa is where we first evolved, and where we have spent the majority of our time on Earth. The earliest fossils of recognisably modern *Homo sapiens* appear in the fossil record at Omo Kibish in Ethiopia, around 200,000 years ago. Although earlier fossils may be found over the coming years, this is our best understanding of when and approximately where we originated.

Eventually, the island of New Guinea got its present shape and the land of Sahul disintegrated. As the sea level rises and the earth gets warmer the Sahul and Sunda land disappeared or went under water and New Guinea came to be as we know today.

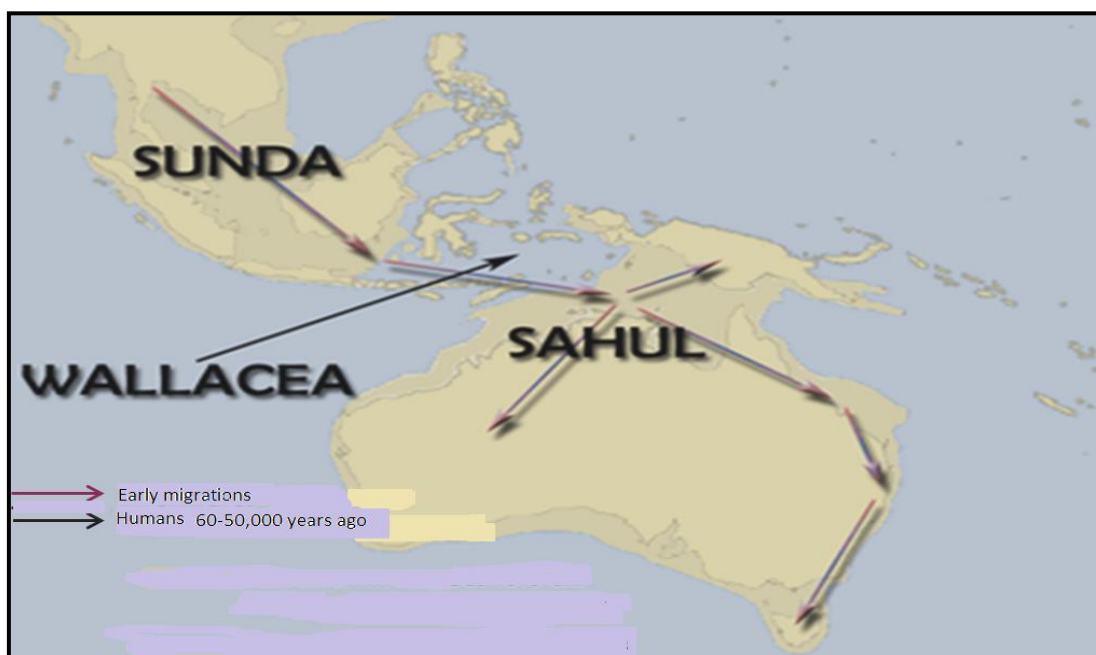
SOUTH - EAST ASIA TODAY



The island of New Guinea and Australian continent slowly emerged into a separate land mass as the earth gets warming up. As the sea level rises the once called Sahul and Sunda disintegrate giving way to present Asia and New Guinea including Australia. The first people may have crossed over the land mass through Sahul while the second wave of migration may have used some form of marine technology to settle into New Guinea and Australia.

Take a look at the possible migration routes the Pacific Pathfinders took and their motives for migrating. The map below shows you two landmasses of *Sunda* and *Sahul* that the Pacific Pathfinders crossed over and eventually settled. The first people probably crossed between the island of New Guinea and Australia through Sahul land. However, these people may also have used the sea route to cross over from the Sunda land into the Sahul.

THE LANDMASSES OF SUNDA AND SAHUL



During the period of low sea level, the island of Tasmania to the south of Australia and the island of New Guinea to the north of Australia became part of one large continent. This huge

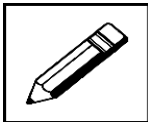
land mass made it possible for the early people to cross over quite easily between New Guinea and Australia. Similarly the South East Asian continent was one land the first people probably crossed over during the Ice Age when these continents were connected together.

Now read the summary.

Sub topic Summary

- The island of New Guinea is the second largest island in the world.
- The eastern half of the island of New Guinea situates Papua New Guinea, and West Papua (Irian Jaya) occupies the western half.
- The Sunda land comprised mainland Southeast Asia, Singapore, Malaysia, Indonesian islands and the Philippines.
- The Sahul land comprised the Australian continent and island of New Guinea.
- The animal and plant life on the Sunda and Sahul land masses developed separately over thousands of years.
- The Ice Age is a period when the climate was colder resulting in the polar ice caps being frozen and a lower sea level.
- A warmer climate results in the ice caps melting raising the sea level.

Now do Activity.



Activity 11.1.2.1

1. What does a geologist do?

2. Which countries or areas comprised the Sahul land mass?

3. What is the name of the land mass that connected mainland Southeast Asia, Malaysia, Singapore, Indonesia, and the Philippines?

4. Find out about the Ice Age. What was it? How did the Ice Age help people migrate across large areas of sea and land masses? Were the sea levels high or low during the Ice Age?

5. Find out about Wallace’s Line. What was its importance? Give a brief description.

6. Where did the human race most possibly originate from? From a science point of view, from which animals did humans evolved from? Give a brief explanation.

Check your answers at the end of sub unit 11.1.2.

Sub topic 11.1.2.2: Early Human Migration

In the last sub topic, you looked at the Sahul and Sunda land masses. In this sub topic, you will discuss the Early Humans that originated from Africa and how and why they migrated into Asia, Southeast Asia and the Pacific. You will specifically look at how these early migrations were traced through the oral and archaeological evidences in spoken language, pottery and drainage ditches.

By the end of this sub topic, you will be able to:

- Identify the origins of the first early humans in Africa
- Briefly discuss how and why the early human migration from Africa, and into Asia and the Pacific
- Identify the migration routes the early people took
- Identify and discuss the different types of oral and archaeological evidences that were used to trace the migrations

Our knowledge of prehistoric development of Papua New Guinea comes from a variety of sources through our studies of the remains of the past. We have fossilised remains widely discovered in various places that tell us how the early humans migrated over large areas of land. The oldest remains of human bones were found more than two million years old in Ethiopia in Africa.

For this reason many historians and scientists presume that humans first appeared in Africa and then spread to other parts of the world as far as Asia and then into Asia, the Pacific and to the island of New Guinea. A six-year study mapping genetic patterns found that people who ended up in Europe, Asia and Oceania got there by crossing the sea around 60, 000 to 70, 000 years ago.

Scientists had thought that humankind left for other continents in a northern direction through Egypt's Sinai region but now it seems they wandered further south, probably via Yemen in the today Middle East. Evidence shows sea levels were probably low enough for the first people to cross from the great continent of Africa and spread over the rest of the world.

From there it seems that southern Asian countries like India were key stopping points from where humans spread across the rest of the world. Settlers followed a coastal route down into east Asia and Oceania while others burst upwards into Iran, Russia, Europe China and then into the Americas.

Our first evidence of earliest human occupation is through the knowledge provided by archaeologists. They said that the Western Pacific region (South East Asia, New Guinea, and Australia) was settled long before the islands of the vast Pacific Ocean. Indonesia has the longest history of human occupation before New Guinea and Australia. The remains of fossils and bones found on the island of Java indicate that early hominids (human-like 'creatures') lived there more than 500, 000 years ago. This is one of the earliest records discovered.

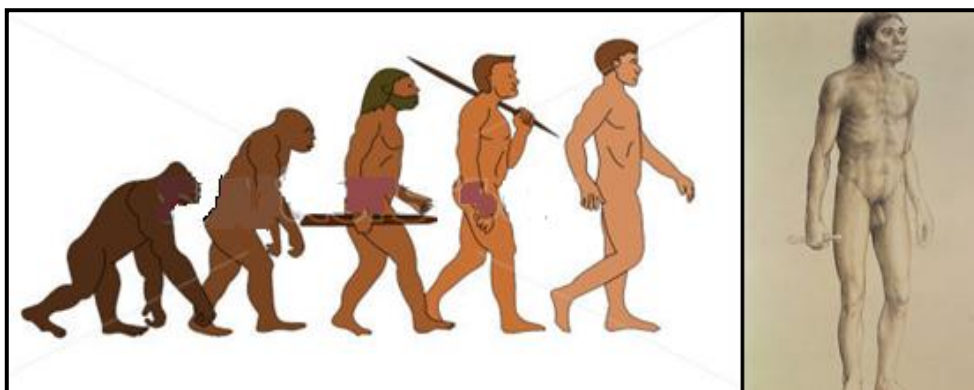


Illustration 11.1.2.2a: Stages of development of Homo Sapiens

Most agreed archaeological dating indicated that modern man (*Homo sapiens*) lived in Papua New Guinea and Australia almost 40, 000 years ago. This is some of the earliest evidence of modern man anywhere in the world. Finally we have settlements in Micronesia about (4,000 to 5,000 years old) and Polynesian islands (1,000 to 3,000 years old). Many archaeologists believe that the original people came to the Pacific from Asia in two major migrations.

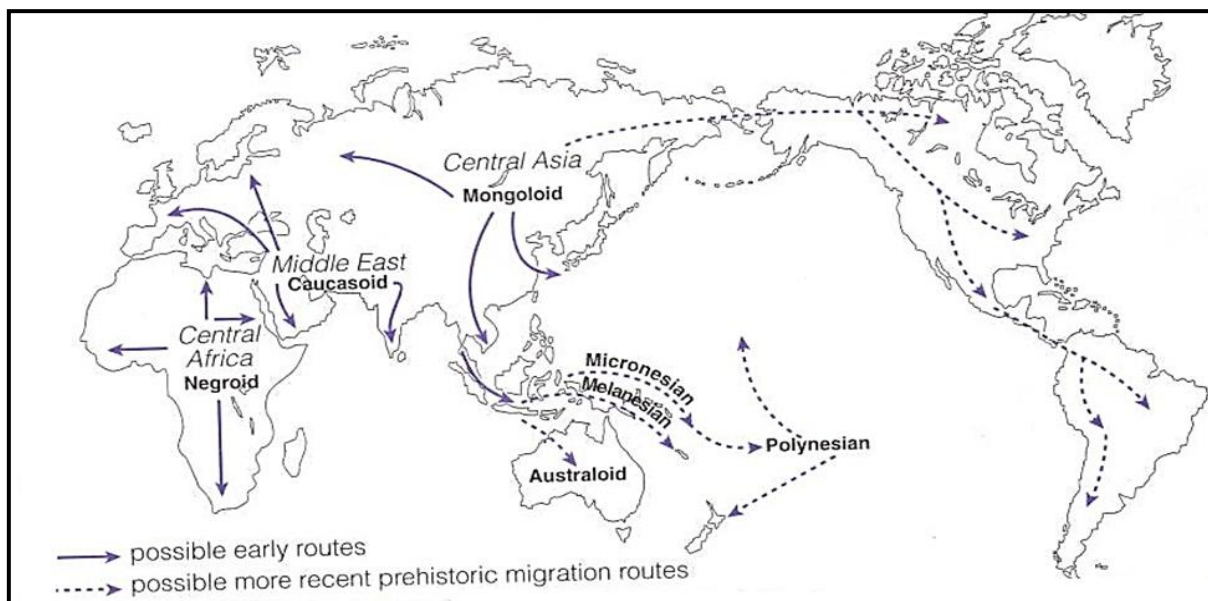
We have little knowledge of the first human inhabitants of Australia and Melanesia. We presume they followed eastern route, out of South China through eastern part of Southeast Asia to the western part of the island of New Guinea and to Australia. Some biologists think that there is a connection between the Australian Aborigines and the people of Bismarck Archipelago like New Caledonia. The linguists also think that there is a relationship between the Aborigines languages and some mainland Papua New Guinea languages. However, the earliest Australians and Papua New Guineans were different people who came by different ways to occupy various land areas.

No matter by what route they came, the earliest humans to reach the enlarged Australian continent crossed over large seas before reaching the land. These people may have some ideas of using sea mode of transport to cross over these vast areas of sea. There is no archaeological evidence from anywhere in the world of sea-going watercraft 50, 000 years ago, so we only guess that they may have used some mode of sea transport to cross. The best guess seems to be that they came on rafts made from bamboo poles being tied together that are flexible enough to drift over. They used this mode to cross into New Guinea and it is seen as one of the earliest sea voyage in human history.

The earliest human site so far found in New Guinea is in the Bobongara area of Huon Peninsula in the Morobe Province. It is about 40, 000 years old. In 1981 Professor Les Groube found distinctive 'waisted-axe' culture. Evidence also shows human settlement in New Britain 35, 000 years ago, New Ireland 32, 000 years ago and Bougainville 29, 000 years ago. There is evidence of people living on Manus Island about 21, 000 years ago. To reach Manus from the main island of New Guinea is seen as one of the earliest sea voyage undertaken anywhere in the world.

The first group came and settled more than 50, 000 years ago during the Ice Age when the sea level was quite low. They are presumed to be the earliest ancestors of the Australian Aborigines and the New Guinea highlanders. In order to confirm these evidences we use artifacts found by archaeologists to trace the possible origin of these people. The 'waisted' stone axe discovery throughout the Pacific and Asia is an indication of people's mobility and trade. The evidence of

lapita pottery also provides useful information about the second wave of migration. Similarly, the linguistic evidence adds more flavour of two distinct language groups which is totally unique and different.



Map illustration 11.1.2.2b: Possible early migration routes

The first group to cross over was the non-Austronesians. They arrived from Asia at least 50 to 40, 000 years ago. During the Ice age, Tasmania in Australia and the island of New Guinea were joined together in one landmass called the Sahul. Much of south-east Asia was joined together by this landmass. This enabled people to walk over to the places they would call home. Sometimes, seas had to be crossed, so the Asian travellers must have built rafts or log boats. Evidence of these crossings is the first example of *marine technology* in the world.

The second group, the Austronesian speakers, came more recently about 6, 000 years ago. They travelled from South China and Taiwan throughout south-east Asia and into Papua New Guinea and other islands of the Pacific. They settled mainly along the coast and the islands. They must have been excellent sea people with very good skills of navigation and preserving or storing food to travel the vast Pacific Ocean at such pace and distance.



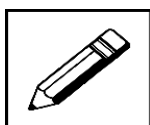
Earliest types of marine technology

Now, read the summary.

Sub topic summary

- The Western Pacific region was settled long before the islands of the vast Pacific Ocean.
- Indonesia has the longest history of human occupation before New Guinea and Australia.
- The remains of fossils and bones found on the island of Java show that early hominids lived there more than 500, 000 years ago.
- Most agreed archaeological dating showed that modern man lived in Papua New Guinea and Australia almost 40, 000 years ago.
- Micronesia was settled about 4,000 to 5,000 years ago.
- Polynesia was settled about 1,000 to 3,000 years ago.
- Archaeologists believe that the early people came to the Pacific from Asia in two major waves of migration.
- The first group came about 50, 000 years ago when the sea level was low; they are thought to be the earliest ancestors of the Australian Aborigines and the New Guinea highlanders.
- Waisted stone axe discovered throughout the Pacific and Asia is evidence of the people's mobility and trade.
- The evidence of lapita pottery also provides useful information about the second wave of migration.
- Linguistic evidence also suggests these movements of people into the different parts of the Pacific.

Now do Activity.

**Activity 11.1.2.2**

1.

- (a) How many waves of migration came into Asia and on into the south Pacific?

- (b) Which wave of migration brought about the non-Austronesian language speakers?

- (c) Where did the people from the first wave of migration settle?

- (d) About when did the second wave of migration arrive in the Pacific?

(e) Where did the second wave of migration settle in the Pacific?

2. Refer to Map 11.1.2.2b and complete filling in the table below.

Island countries are not situated on continents therefore you must indicate 'Region' when referring to any one of them.

Race	Continent	Region
Negroid		
Mongoloid		
Austroloid (Australian Aborigines)		
Melanesian		
Polynesian		
Micronesian		
Caucasoid		

Check your answers at the end of sub unit 11.1.2.

Sub topic 11.1.2.3: Early Settlers

In the last sub topic, you looked at the Early Human Migrations. In this sub topic, you will look at the Early Settlers that came to the island of New Guinea. You will identify and discuss the stages of development of their way of life from hunters and gatherers to gardeners.

By the end of this sub topic, the students should be able to:

- Identify possible reasons that caused the early people to migrate
- Briefly discuss the early settlers' way of life
- Examine an archaeological evidence found on Kuk plantation in a case study

There should have been certain factors that may have pushed the early people away from their environment. Perhaps, the main cause was famine and climate change which made living in these vast continents impossible. The early people may have been left with no choice but migrate to safer places for settlement.

The initial spread of humanity across the earth was driven primarily by food and climate. Nomadic tribes of up to a dozen people followed the migration patterns of the herd animals they hunted. Climate change opened new areas for hunting, even as technology such as mastery of fire and meat preservation allowed humans to live in less- than-ideal conditions. The human ability to adapt to new circumstances not only gave early humans an advantage, it also facilitated global expansion.

The first inhabitants were nomadic hunters and gatherers who moved within their traditional tribal boundaries following the annual food supplies. The aborigines of Australia obtained their food by moving from places where they could find fruits, nuts and shelter. Still today there are people who are always on the move looking for environment that is favourable to them. Archaeological evidence from the Kuk plantation in the Waghi Valley reveals that more than 10 000 years ago the early highlanders did farming in the area. Apart from farming they also kept pigs and other livestock. Similarly, the coastal and island people got food from the sea and also from the land environment.

Human societies including the early people in New Guinea evolved in stages over thousands of years.

- The first stage was hunting and gathering. This means people were still moving from one place to the next.
- The second stage was hunting, gathering and a settled little hut. When the people settled, it eventually led to agriculture.
- In the third stage, people learned to make gardens, plant crops, and raise animals.

Now, turn the page and read a case study on the Kuk plantation and drainage ditches.

Case Study: Kuk archaeological evidence

Archaeologists discovered the Kuk drainage ditches in 1972. This archaeological evidence is situated in the Waghi Valley plateau in the Western Highlands Province. The studies of the swamp reveal that agriculture started in the area over 9,000 years ago. This makes it one of the earliest known places to practice intensive shifting cultivation and agricultural sites in the world.

Its study has revealed a lot about the development of agriculture. In 1972 Kuk plantation was nominated to be on a possible listing as a World Heritage Site. Archaeologists continue to work on the sites today.

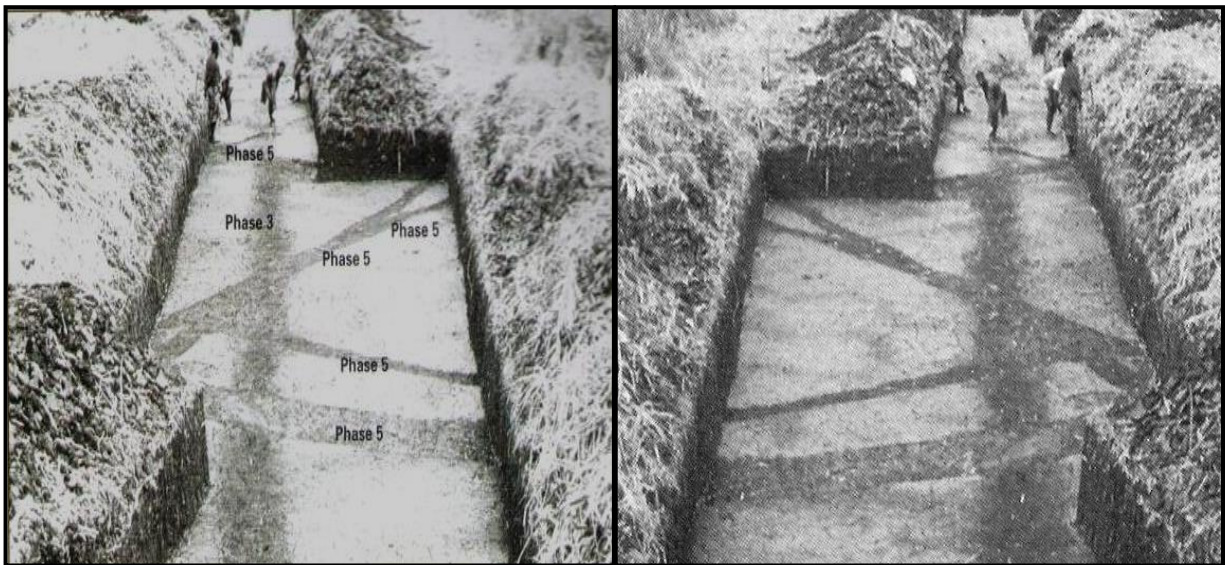


Illustration 11.1.2.3a: Excavating part of the ancient drainage system at Kuk tea plantation, near Mt Hagen.

Kuk swamp is one of a number of swamps in the fertile Wahgi Valley. Archaeologists came to Kuk to study these old wooden sticks and ancient drainages. They also looked at the walls of the newly dug drainage ditches and found traces of older drainage channels. There are two things that confirm the existence of early agriculture in the area. Study of the swamp revealed that agriculture started in the area over 9,000 years ago. This makes Kuk site and Papua New Guinea as one of the earliest known places in the world to practice early agriculture. The different layers of ditches in the swamp show that wetland drainage was practiced a number of times.

The deposition from the deepest part of the swamp reveals that 9,000 years ago there was shifting cultivation under long forest fallow in areas surrounding the swamp.

There were practices like casuarina planting and the development of raised garden beds. This is one of the earliest primitive gardening in the world. When Papua New Guineans started to settle and practiced gardening, the Aborigines and other early people were still living a nomadic lifestyle.

If our people were the first to do shifting cultivation then they are also the first people to live in hamlets and small nuclear village settlements. This view also puts our people on track of being

the first people to domesticate animals for personal consumption. Historians and anthropologist also believed in the creativity of our people in terms of developing a complex cultural belief and practice.

These people began to change the environment through their search for food and other survival needs. They hunted in the forest, fished in the rivers and cleared the forest for gardening and shelters. From the nomadic life style people were able to adopt a more permanent settled way of life.



Beginning of Gardening

Settled Family Life

The first contact with the island by Europeans occurred in the early 16th century, when the Portuguese explorer Jorge de Meneses sighted the country and named it, *Ilhos dos Papuas*, which means the 'Land of the fuzzy-haired people'.

However, it was not until the mid-1800s that European missionaries and traders began to settle on the island. Even those few settlers limited their presence mostly to the accessible coastal areas.

Over the next several decades Papua New Guinea was claimed by the Germans, the British, and the Dutch, but it came under the control of Australia after World War One. The inland Highland regions, thought to be too inhospitable for habitation remained unexplored until the 1930s. In searching for gold European explorers discovered over one million people, living in the fertile mountain valleys since the **Stone Age**.

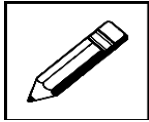
Now, read the summary.

Sub topic Summary

- There were factors that caused people to move away from their environment.
- The initial spread of humanity across the earth was driven mainly by food and climate.
- Nomadic tribes followed the migration patterns of the herd animals they hunted.
- Climate change also created new opportunities in hunting which eventually led to people more conducive environments.
- Human societies evolved in stages over thousands of years.

- The drainage ditches found at the Kuk plantation provide archaeological evidence that suggest Papua New Guineans to be the first gardeners in the world.
- The discovery of farming and raising animals led to a settled way of life.

Now do Activity.



Activity 11.1.2.3

1. Briefly describe the three main stages of human development.

Stage 1 _____

Stage 2 _____

Stage 3 _____

2. What is the significance of the Kuk drainage ditches?

3. Why do you think people change their environment?

4. The early people developed a complex culture. What is culture?

5. Find out about the Stone Age period. Briefly describe the type of tools used during this time.

Check your answers at the end of sub unit 11.1.2.

Sub topic 11.1.2.4: Archaeological Evidences: Waisted-stone axes and Lapita

In the last sub topic, you learnt about Early Settlers on the island of New Guinea and their discovery of farming which had led to a settled way of life. In this sub topic, you will discuss about another two types of archaeological evidences that were used to trace the migration of the early people from Asia and on into the Pacific.

By the end of this sub topic, the students should be able to:

- Identify the different types of archaeological evidence
- Make a link between these archaeological evidences and migration
- Interpret maps and locate correctly the places these evidences are found in

There is insufficient information and archaeological evidences to trace back the origin of our people. The archaeological evidence discovered in the Pacific provides us with the waves of migration that entered the Pacific and the types of tools and items used over thousands of years. The most renowned evidences we have in the Pacific is the Lapita pottery and the waisted stone axes also found in parts of New Guinea. The archaeological sites can be given a more accurate dating through the use of multiple cross-dating instruments that allows for extremely accurate dating as far back as 10, 000 years in some region.

Archaeological evidence

There are many sites in Papua New Guinea that have been discovered to show evidence of early man. There are also many that have not yet been studied.

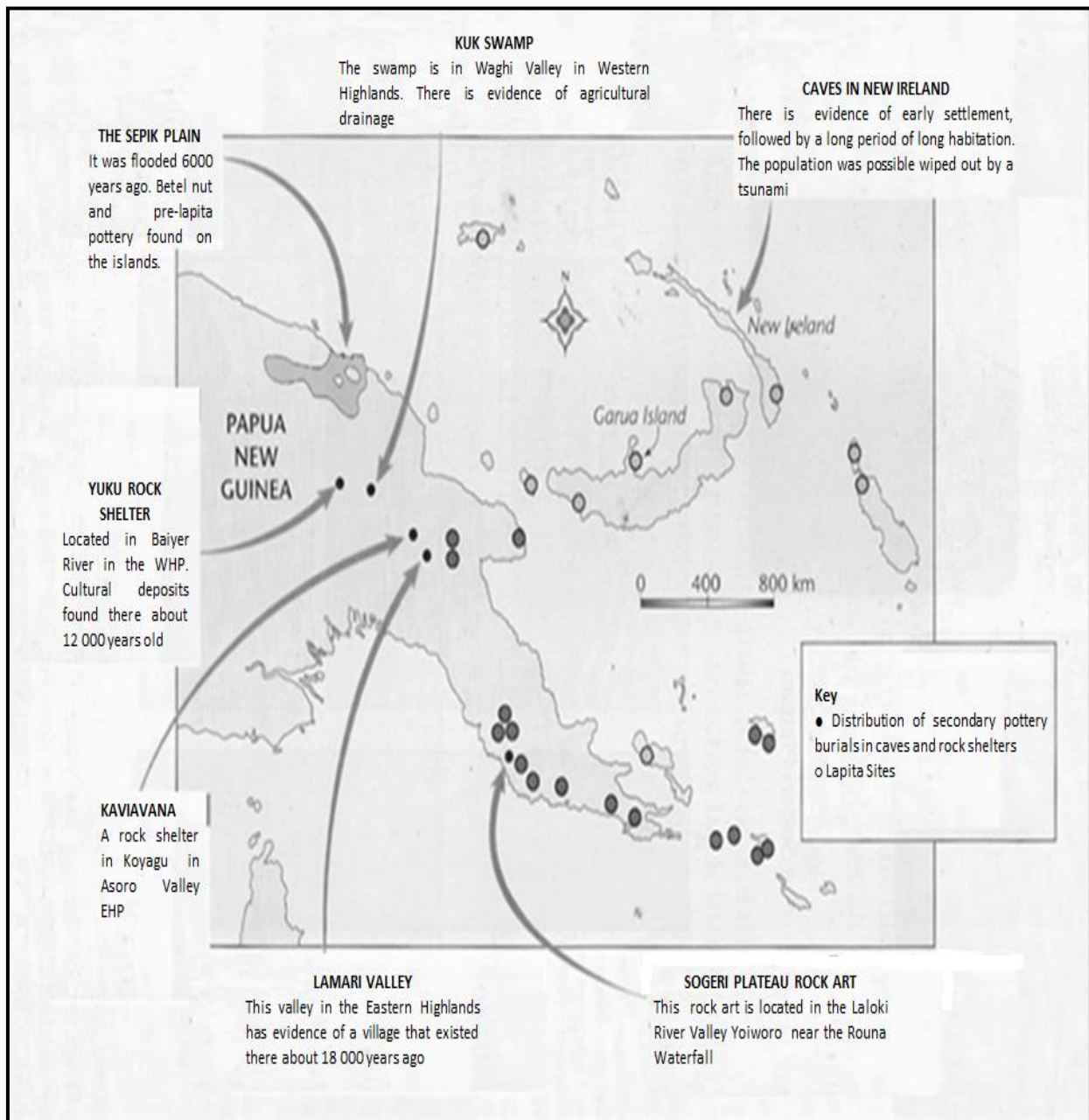
On the Sogeri Plateau there are rock paintings that are also evidence of the far distant past. The Koiari people who live in the area now believe that these paintings were there before their ancestors moved into the area. Now we ask the question of who were the people who did these paintings. What happened to them if they are not related to the Koiari people who live there today?

Bosmun and Kambot in East Sepik were once islands when the mouth of the Sepik River was flooded. There was evidence of betel nut. This evidence was buried under layers of mud and silt. Betel nut is not native to Papua New Guinea and we believe it originated in South East Asia. Who then were these people who brought betel nut to this country and to the other islands of the Pacific?

All these archaeological sites raise more questions and do not provide all the answers that archaeologist would like to know. Some of these questions may never be answered.

However, one thing is certain. At some point in time, people moved into the present-day Papua New Guinea and into the other islands of the Pacific. Before they came, the island was uninhabited. These people can be described as 'pathfinders' because they were the first people to come. Other people followed their path and settled the land. These people are the ancestors of modern day Papua New Guineans.

The following map shows archaeological sites and some examples of archaeological discoveries in Papua New Guinea.

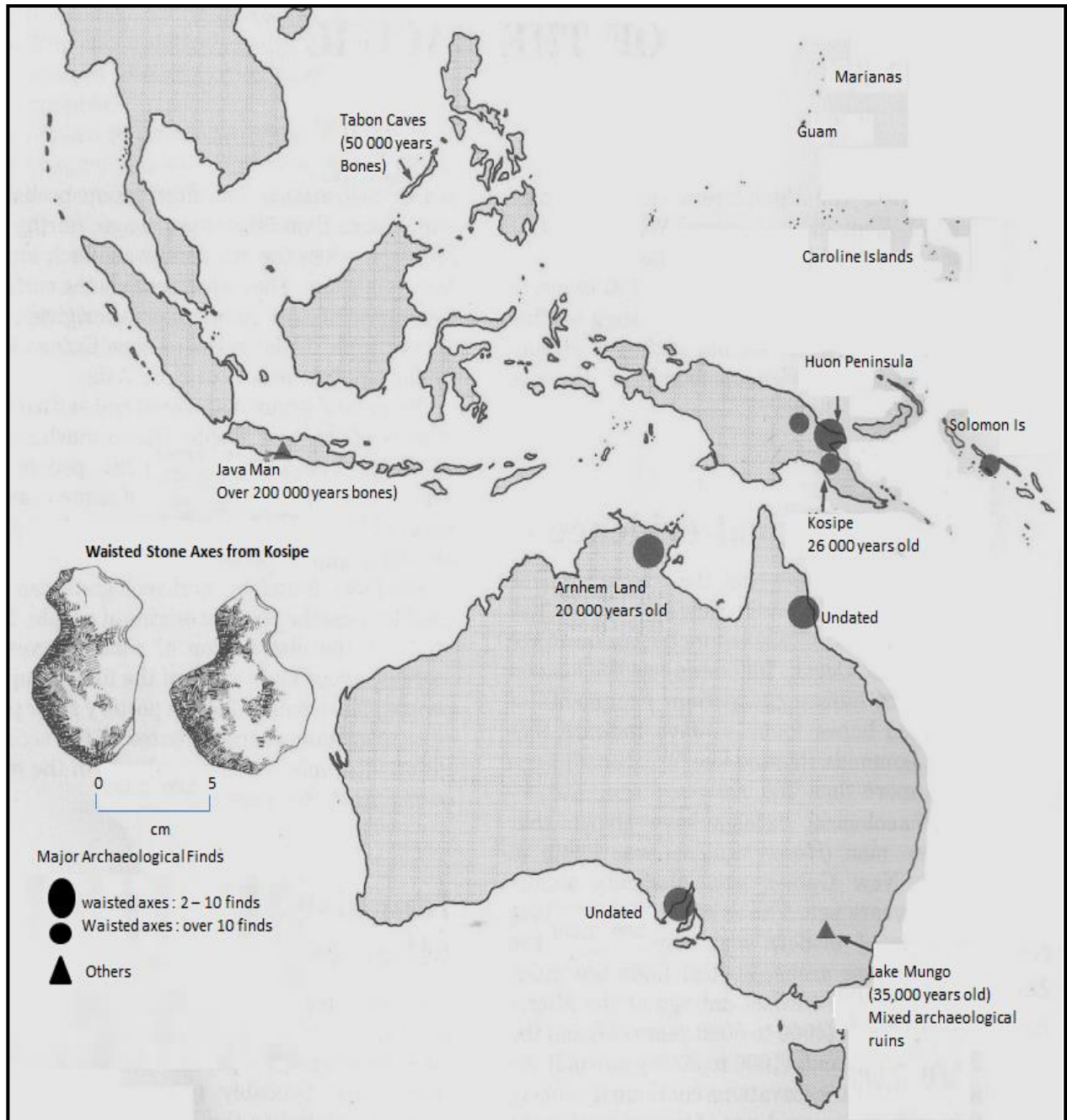


Map illustration 11.1.2.4a: Archaeological sites in Papua New Guinea

We have a lot of evidence in New Guinea to identify the human occupation in the island. It is presumed that people first settled the island of New Guinea and Australia before stretching to other smaller islanders in the Pacific. It is also evident from the earliest human activity and materials discovered that show the knowledge and skills of these people.

The dates of the finds of the waisted axes prove to us about the origins of today New Guineans who were in this region 40, 000 years ago. These tools were used for gardening and building houses. The discovery tells us about a type of farming that was done at two different places about the same time. In both areas archaeologists have found that they both date back about the same time, that is, some 10,000 years ago.

EVIDENCE OF WAISTED AXES

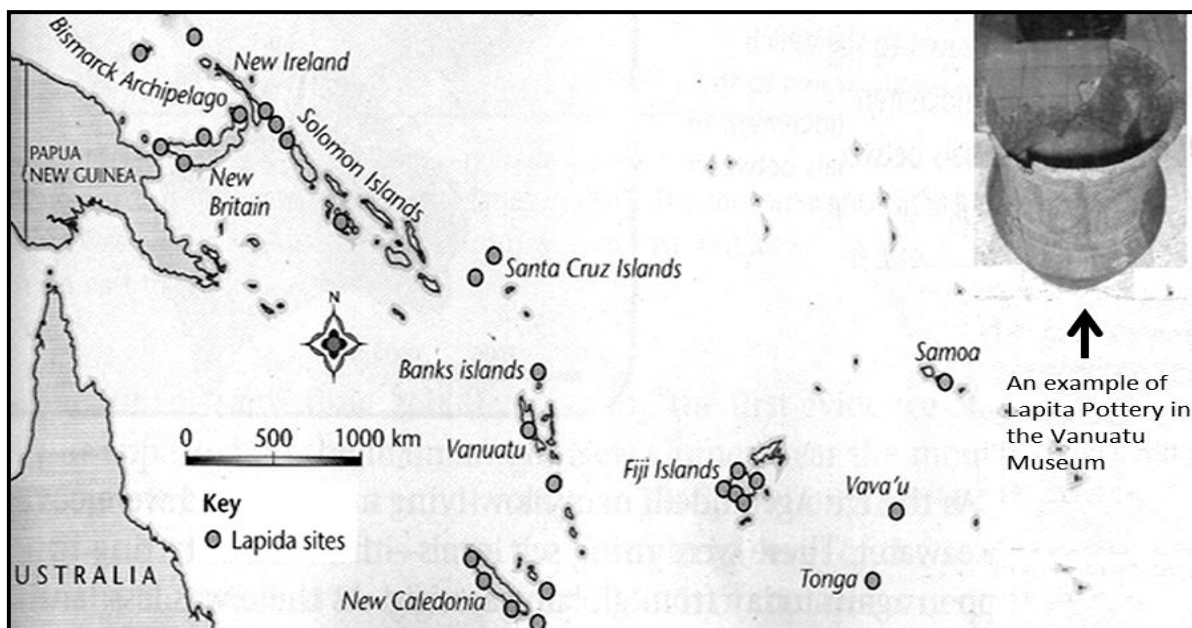


Map illustration 11.1.2.4b: Waisted stone axes

Waisted stone axe is probably one of the earliest evidences we have to trace back the routes of these earliest people and their movements. This information is vital because it provides useful information about the movement of the second group of people who migrated into the Pacific. These are ancestors of the Pacific islanders.

There was also a frequent use of two way trade of a specific artifact, the Obsidian. This tool was traded about 6,000 years ago. The people who traded this were not the same as the first group of people who came to Sahul. They were still Homo sapiens but had evolved in a slightly different way.

The map below shows the Lapita finds that spread across the Pacific from Papua New Guinea.



Map illustration 11.1.2.4c: Lapita pottery

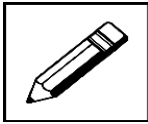
The Lapita dates back to a period of time from 1600 BC to 500 BC. The dotted circle on Map illus. 11.1.2.4c shows the places where Lapita pottery was found. This pottery has been a major evidence of the second group of people. This evidence suggests that there was a cultural link between these people and some form of trade took place. The Lapita people moved from the present day Indonesia to the islands of Papua New Guinea and moved further into the South West Pacific. This happened over a period of time from 1600 BC to 500 BC.

Now, read the summary.

Sub topic Summary

- The findings of archaeological evidences suggest the path the early people took into the Pacific.
- Archaeological evidences include waisted stone axe and Lapita.
- Waisted stone axes were used by the early people in cutting down trees for gardening.
- Lapita pottery was used in trade and was left behind when people moved to new places to resettle.
- Archaeological sites in Papua New Guinea portray a variety of evidences.
- Archaeological evidence helps the work of archaeology by telling us about the way of life of the early people.

Now do Activity.



Activity 11.1.2.4

1. Use Map illus. 11.1.2.4a to answer the following questions in a table.

- Name the highlands provinces that have archaeological evidences
- Identify the type of evidence
- State the date of existence
- State the importance of this evidence

Highlands Province	Type of evidence	Date of existence	Importance

2. Name the island countries or places in Melanesia that have evidence of lapita pottery.

3. Were waisted stone axes found only here at Kosipe and the Huon Peninsula in Papua New Guinea or in other places as well? If axes were also located in other places then state the names of these places and the dates found.

4. Write True or False for the following questions.

- The island of New Guinea was already occupied by settlers when the early people arrived 50, 000 years ago. _____
- Early people used lapita between 1600 and 500 BC. _____
- The lapita trail indicates the places the early people had occupied. _____
- Waisted stone axes were used for weeding. _____
- Lake Mungo archaeological site in Australia has mixed archaeological ruins.

- Waisted stone axe and lapita are botanical evidences. _____

Check your answers at the end of sub unit 11.1.2.

Sub topic 11.1.2.5: Austronesian and Non-Austronesian Languages

In the last sub topic, you discussed archaeological evidences mainly of the ‘waisted’ stone axe and lapita pottery that had provided clues to archaeologists about how people may have lived and where. In this sub topic, you will discuss oral evidence of spoken languages that tell us about the migration of the early people into the Pacific and southward to Australia.

By the end of this sub topic, the students should be able to:

- differentiate between Austronesian and non-Austronesian languages
- discuss how migration patterns within the Pacific are traced through these languages
- compare a particular word in different languages

Linguists divide the languages of Papua New Guinea into two separate groupings called the **Austronesian** and **non-Austronesian** languages. The non-Austronesian languages are also related to each other and commonly spoken throughout many parts of Papua New Guinea. The Austronesian languages are thought to have originated much later than the non-Austronesian languages from the islands of South East Asia. The linguists and historians presume that Austronesian languages arrived in Papua New Guinea only about 4, 000 to 3, 500 years ago. The non-Austronesian languages are different from one another; however, there is firm belief that these languages are somehow related. It is only in the last 50 years that linguists discovered that and were able to prove that they are related.

The Austronesian languages are closely related that even people not trained as linguists can figure out easily. This is evident where the Austronesian languages are spoken in a great chain of islands, from Madagascar, near the African coast through to Indonesia and the Philippines. It is widely spoken in the Pacific islands and extending as far as the Easter Islands near the coast of South America.

When we study these languages closely we can identify certain links between people. This is evident when we compare some of these languages as shown in the table below.

A COMPARISON OF SOME PACIFIC LANGUAGES

English	Bahasa (Indonesia)	Tagalog (Philippines)	Motu	Kuanua	Engan	Maori	Tonga
Bird	Burung	Ibon	Manu	Beo	Yaka	Manu	manu
Man	Laki	Lalaki	Tau	Tutana	Akari	Tangata	Tangata
Yes	Ya	Oo	Lo oibe	Ala	Yakalum		Lo
Eye	Mata	Mata	Mata	Mata	Lenge	Mata	Mata
Two	Dua	Dalawa	Rua	Lua	Lapo	Rua	Ua

We can identify the difference with the word ‘eye’ it is pronounced ‘mata’ right from Indonesian through to Tonga while it is quite different from Engan. This evidence also confirms the theory of two waves of migration into the Pacific region. The first groups were non-

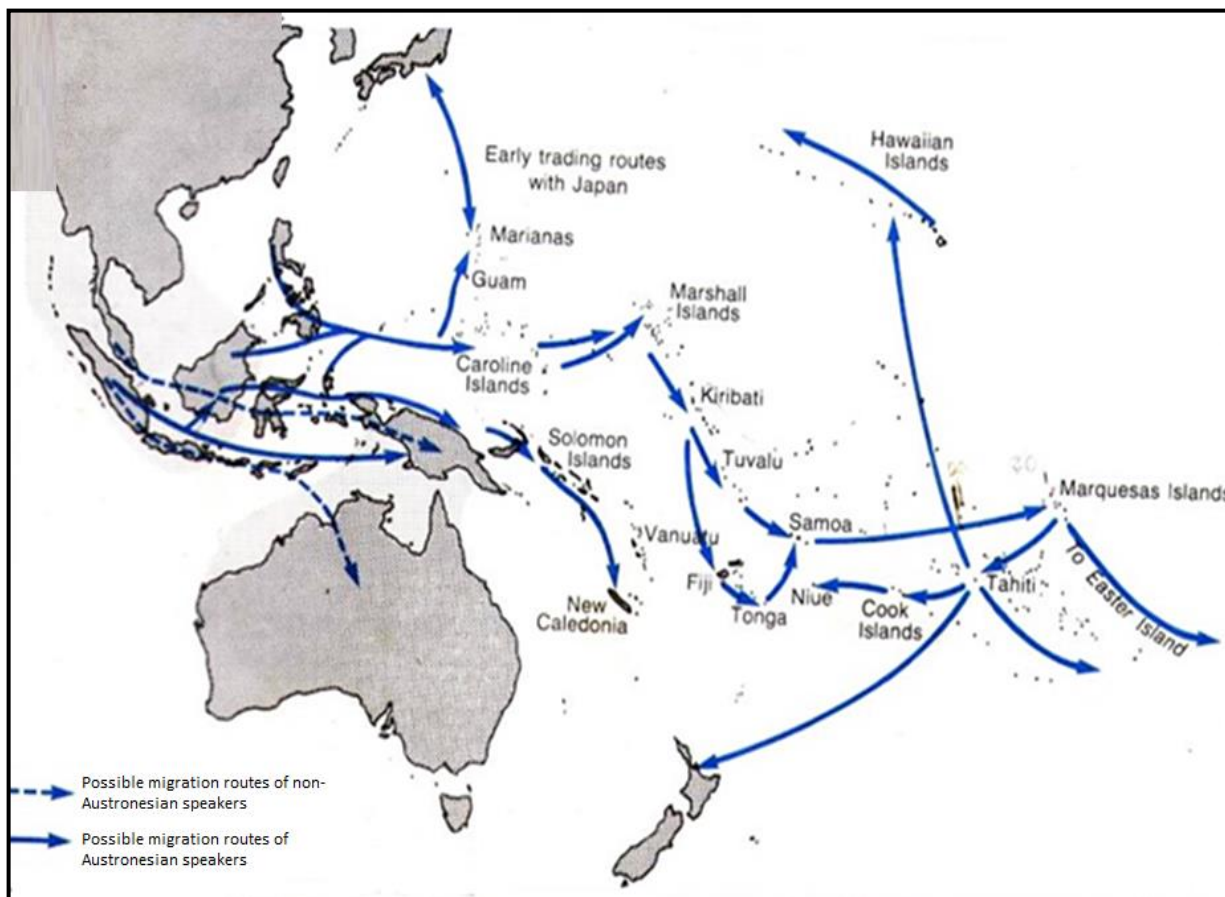
Austronesian speakers that dominated the New Guinea Highlands languages and the latter Austronesian languages spoken throughout the islands regions of New Guinea and across the Pacific.

In New Guinea, the Austronesian languages are mostly spoken on the coast in the island provinces. This language is also spoken in Polynesia, Micronesia and Melanesia. In Papua New Guinea it is spoken in Manus, East and West New Britain. The other Melanesian countries it is spoken in are the Solomon Islands, Vanuatu, New Caledonia and Fiji. Some Austronesian speakers from Melanesia are brown skinned and have straight or wavy hair and often look like South East Asians. In Bougainville you will find black skinned people with frizzy hair.

These languages are changing rapidly forming a mixture due to inter-marriages between the Austronesian speakers and non-Austronesian speakers. As science and technology is changing there is also a trend where languages are in danger of transforming into a mixture that can be dangerous. Language is one of our cultural identify and it has to be preserved like any other cultural artifacts and monuments.

There are approximately 800 languages in Papua New Guinea and they belong to quite distinct language groups. Linguists think that as many as 500 of the 800 languages may originally belong to one language group which spread across the country. These languages belong to the Austronesian languages which came through the second wave of migration into the Pacific. The majority of the mainland New Guinea is occupied by Non-Austronesian languages which originated from the first migration.

The following map illustrates the trend in these languages. Study it carefully.



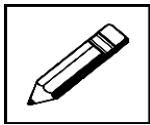
Map illustration 11.1.2.5a: Regions of Austronesian and non-Austronesian speaking languages

Now, read the summary.

Sub topic Summary

- There are two different groups of languages spoken in the Pacific.
- Austronesian language speakers came in the first wave of migration to mainland New Guinea and southward to Australia.
- Non-Austronesian speakers came in the second wave of migration to the New Guinea islands region and on into the other Pacific islands.
- There are about 800 different language groups in Papua New Guinea.

Now do Activity.



Activity 11.1.2.5

1. Define the word linguist.

2. Name the two language groups widely spoken throughout the Pacific region.

3. Which of the language group is common along the coast and highlands of Papua New Guinea?

4. State three reasons why language is changing rapidly and forming a mixture.

Check your answers at the end of sub unit 11.1.2.

Sub topic 11.1.2.6: Cultural Diversity and Social Organisations

In the last sub topic, you looked at two groups of languages called the Austronesian and non-Austronesian languages that were brought to the island of New Guinea and on into the Pacific by early people. In this sub topic, you look at an aspect of history that is Culture and Social Organisation.

By the end of this sub topic, the students should be able to:

- Differentiate between culture and cultural diversity
 - Discuss how culture and social organisation affect traditional life
 - Identify the different social organisations at the traditional level
-

Culture and diversity

Culture is a way of life of a group of people and how they carry out activities, behave and interact with others. It includes beliefs, art and social organisations.

For instance, the way 'Tolais' of East New Britain Province, practice their marriage ceremonies and rituals in their culture. This is example of a 'way of life' of the Tolais. It is quite different from the way the Goilala people of the Central Province and Gulf people perform their marriage ceremonies and rituals. The activities from these different provinces represent what is called cultural diversity. It means that our cultures are very different from one another and unique.

The two major waves of migrations from Southeast Asia to the island of New Guinea and into the Pacific at different times over thousands of years brought different ideas and cultures. (Refer to previous sub topic to recap).

There is always a change and mixture when there is an existing culture and new cultures coming into contact. It is out of many such encounters at different times and in different places that the diversity of Papua New Guinea peoples and culture had developed. The archaeological evidences also provided us with useful information to distinguish the waves of different migrations into our regions. Our first ancestors lived here about 50, 000 years ago; however from this period until recent times there is continuous movement of people. People come in with their cultures and traditions. Their worldviews and the way they practice their beliefs and rituals are diverse meaning it is quite different to one another.

From a nomadic hunting and gathering lifestyle our people developed a complex culture. Even the Europeans were not able to understand the uniqueness of our people and their cultures. They developed a culture that is quite unique and fascinating throughout the island of New Guinea. The highlanders were the first people to settle permanently and may have been the first people to do gardening (refer to sub topic 11.1.2.3), while the Aborigines (in Australia) were still living nomadic lives.

At the village level here in Papua New Guinea the people are organised into small family units and then into a bigger clan and tribe systems. In these groupings they set up their governance systems with the headman, chiefs, and elders who performed the duties of law and order agents for the community.

In the highlands region, certain people lived as great warriors who were known for bloody tribal warfare with the common method of beheading opponents. These practices ended with the arrival of the European Christian missionaries. Regardless of our cultural differences we continue to live together as one people united in one country though with diverse cultural backgrounds.



Illustration 11.1.2.6a: Diversity of cultures in action



Illustration 11.1.2.6b: A woman in agony over death

In the cultures of the highlands, women rub grey and red clay over all parts of their bodies, beach necklaces and long grass skirts shall be worn for more than a year. This practice happens during the death of their loved ones. The removal of these decorations is followed by a big feast of pig killings. This was also done to commemorate the anniversary of their loved ones.



It is quite normal a practice for the highlanders to build a round house on the ground to keep them warm from the cool climate.

Illustration 11.1.2.6c: Typical highlands round house village, Southern Highlands

Social organisation

Culture is the way we live and organise our lives. The language that we speak and communicate with others is part of our culture, too. We are also identified by the way we dress traditionally. In the past, people were able to recognise each other just by looking at traditional dressing and physical appearances. There is no wrong or right in our cultures unless it involves beheading or killing of each other. This is not allowed even by our traditional laws.



Western Province



Hela Province



Jiwaka Province

Illustration 11.1.2.6d: Different cultures convey sacred and different meanings

The society on the mainland of New Guinea was organised under the leadership of the big man systems. Much later more people with distinct cultures and traditions arrived on the main island about thirty centuries ago. They are also recognised as the Lapita people. These people centered their society on the leaderships of chieftaincy. Long before that, Melanesian societies organised themselves into social units. They had traditional governance systems based on leaders and elders taking the responsibility of mediators.

Land and property rights generally pass from parents to children or from uncles to nieces and nephews. These kin relations are extended to other members in an individual's kin group. All these persons have an interest in the prosperity of the kin group, and those of the younger generation who contribute the most to that prosperity are likely to receive the most. Reciprocity is a key element, and non-kin can become "sons" and "daughters" of group if they contribute generously to group affairs. While women do not use clan or lineage lands, they retain the option to do so by contributing to group exchanges.

The important kin groups are patrilineal and matrilineal lineage and clans. Clan members do not necessarily live on clan land. Women marry out, and migrants move far from their ancestral territories to find wage employment and other benefits in town. All the members of a kin group must participate in clan affairs, contributing to bride prices and other exchanges and helping with initiation and mortuary ceremonies. Clans and lineages can shrink and disappear through deaths and indifferences. Persons join other clans, allying themselves with their wives' clans or being adopted as children. An important asset is the land a clan's members hold in common. Land is valuable and a way of life for 85 percent of the population. It is also a form of social security for persons living in towns, most of whom actively engage in group affairs to maintain their rural option.

In patrilineal societies the right to own land is handed down from father to son. This is evident in the highlands cultures. In matrilineal societies, land was handed down from the mother to her daughter. In patrilineal societies people traced their ancestors through their father's side of the family tree likewise in matrilineal societies land rights were passed from mother to daughter. In regions like Buka (in the Autonomous Region of Bougainville) and New Ireland Provinces the people still embrace matrilineal practices. Women had greater status in matrilineal societies than in patrilineal societies.

Many societies embrace the patrilineal cultures where the men seem to dominate and inherit the wealth of their fathers. This is common in New Guinea highlands cultures and mainland coastal areas. In patrilineal societies, power, authority, respect and influence rested with a leader known as a 'big man' who achieved his position through his personal ability.

Characteristics of a big man

- physically strong
- hardworking
- wealthy (traditional possessions)
- a good organiser
- a skillful manager of people and resources
- a powerful orator

- did not exercise powers by commanding people to do things but by setting example
- guided people to do the right things
- used his influence to settle disputes and arguments between parties

A family tree shows how the people in a family are related to one another by blood, kinship or adoption.

There are also other societies that gave equal weight to both the father's and mother's sides and had rights to land from both the father and the mother.

Out of these systems our people developed one of the most complicated customs and practices unique to themselves.

Any male in the clan could become a 'big man' if he had the required leadership qualities. This is known as an **egalitarian or equalitarian** society. This only applies to the male folk.

Some societies embrace the chieftaincy system of leadership. The chiefs inherited the position from their fathers and one could only become a chief if their father was a former chief. This type of leadership is inherited.

The smallest social unit was the family made up of the father, mother, and the children. Each family had its extended families, which included aunts, uncles and cousins within a group of clans.

A clan consists of members closely related to one another through blood, marriage or adoption.

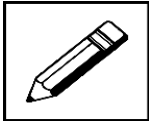
Equalitarian society is a society in which men have equal rights and opportunities. Chieftaincy was a system where a leader was the paramount chief with lesser chiefs below him on the social ladder.

Now, read the summary.

Sub topic Summary

- Culture is a way of life of a group of people.
- Papua New Guinea cultures are many and diverse.
- There are about 800 different language groups.
- Societies follow a matrilineal or patrilineal family lineage.
- Some societies follow a chieftaincy type of leadership.

Now do Activity.

**Activity 11.1.2.6**

1. How can a man become a leader in an egalitarian society?

2. List four important characteristics of a big man.

3. What is cultural diversity?

4. Write True or False for the following statements.

- (a) Papua New Guinea has many different cultures. _____
- (b) A tribal warrior is part of the highlands culture. _____
- (c) Matrilineal societies are common on mainland Papua New Guinea. _____
- (d) Patrilineal societies follow the mother's lineage. _____
- (e) An egalitarian society supports equal rights and opportunities for men. _____
- (f) Extended family makes up a clan. _____
- (g) Land and property rights generally pass from parents to children or from uncles to nieces and nephews.

Check your answers at the end of sub unit 11.1.2.

Sub topic 11.1.2.7: Daily Life, Customs and Traditions

In the last sub topic, you discussed Culture and Social Organisation at the traditional level. In this sub topic, you look at Daily Life, Customs and Traditions of people in Papua New Guinea.

By the end of this sub topic, the students should be able to:

- Identify and discuss the daily life, customs and traditions of Papua New Guineans
- Differentiate between the main customs and traditions of the four regions of PNG
- Reflect on your own traditional values, customs and traditions that are important in your society.

Customs

Custom refers to the generally accepted ways of behaving or doing things in a society or a community. Customs are our everyday behaviour and generally accepted conduct in the society. The members of a community are naturally inclined to abide by the rules laid down by the *big men*, elders or chief in the village. The custom of our Melanesian society does not allow cousins to be married. This kind of act is contrary to our customs and beliefs, and is taboo.

Traditions

Similarly, a tradition is a belief, custom or way of doing something that has existed for a long time among a particular group of people.

For instance, our people developed strong traditions about spiritual god's intervention during sick and hunger. These traditions were accompanied by animal sacrifices and secret rituals. Such acts are being performed generation after generation and become tradition.

Marriage

The choice of a marriage partner is rarely left to the individual. After initiation into adulthood, young men and women spend time with the opposite sex in supervised courtship sessions. Ideal marriage partners are those who are hardworking and attractive.

Clan **exogamy** is a must, and parents hope their daughters will marry prosperous suitors whose kin pay large bride-prices and who will be good allies in exchange and war. Women forced into marriages can return home or threaten suicide. If those strategies fail, young women may run away with lovers or commit suicide. Men are more likely to be unmarried, as polygyny is practiced and big men attract a greater share of wives. Divorce occurs even in areas where parties have different view on family matters. After divorce, most adults remarry unless they are very old and living with children or grandchildren.

Currently, the practice of women competing for men rather than men trying to attract women is having an impact on marital politics throughout the nation.

Exogamy refers to marrying outside family or tribe.

Fighting

People fought for various reasons and the common ones are for land and woman. Most women captured during the fights are forced to marry the victor's clan or tribe. In the past a woman was also given away in return for another in order to develop a deep relationship. Payback or revenge killings were a norm in Melanesian societies. Sometimes people used sorceries and witch craft to kill their enemies.

Singing and dancing

Most festivals were comprised of singing and dancing which was performed in a cleared space in the village. In some areas planting and harvesting of crops were accompanied with singing and dancing as celebration. Both men and women sang songs that have certain meanings. In the highlands songs were sung during singing to irritate their enemies. Festivals were used as a courtship avenue for young adults to establish deep relationships. Most songs sang during these festivals were handed down many generations. The photographs show different types of dancing and decorations in Papua New Guinea.



Illustration 11.1.2.7a-b: Dancers of the Central Province. *Above* : The famous Huli Wigmen of the Hela Province

Arts and crafts

The headdresses were colored including the faces with different paintings. The designs and colors used to decorate their body parts and traditional costumes signify different meanings and also related to their spiritual world. The kundu drums and garamuts were specially designed in different sizes and forms.

There were varieties of arts and crafts that were unique to each culture throughout the Pacific and Melanesia.

It consisted of paintings, sculpture, carvings, masks, bark cloth, baskets, and string bags known as bilums.

The decorated objects include clay bowls, jars, shields, canoes and musical instruments.

Materials used included wood, coconut shells, leaves, seeds, clay, bones (humans) animals, birds and fish.

The colours came from the lime, clay, fire seed (charcoal) mixed with water and vegetable oil. Tools were made from stone, bones and shells.

Here are pictures of traditional Papua New Guinean products.



Illustration 11.1.2.7c-e:
A carved wooden story board



Tolai basket and shell money (ENB)



Tapa cloth, Oro Province



Illustration 11.1.2.7f-h:
A clan basket, watam, East Sepik



Siassi island bowl, Morobe



Trobriands Island's lime pot

Traditional practices

The people also developed traditional methods of producing fire for cooking. They used dry woods or bush ropes and twigs which rubbed against each other causes friction that eventually produces fire.

Look at the various traditional ways of starting a fire.



Illustration 11.1.2.7i-k:
Bamboo and wood
rubbed causes friction



Wood rubbed with dry
leaves causes friction and
produce smoke



Wood to wood rubbed
causes friction and
produce smoke

Oral Tradition

Oral traditions include stories about the history of a certain group. Many stories have been told about how the highest mountain in their area came into being. They also have stories describing the origin of plants and animals, migration, kinship and warfare. These stories are

handed down for many generations and we call them oral traditions. These stories are legends which are attempted to explain how certain things were formed.

Spirit houses and Beliefs

Many rituals focus on health and fertility, such as male and female initiation rituals. It is aimed at bringing about the maturation and future success of the initiates. The initiation involves seclusion in the forest or a menstrual hut, fasting and food taboos, and body mutilation. Initiates seek contact with spirit guides who will help them throughout their lives and even assist in good marriages. Initiation and other ceremonies focus on seeking the help of ancestors which is accompanied by the exchange of valuables and food.

In preparation for war or in compensation for war deaths, a group may sacrifice hundreds of pigs to call forth the aid of the ancestors. Cannibalism and head-hunting were not universally practiced but often aimed at showing power, strength and acquiring bravery. Often young warriors display enemies' heads as symbols of their own magic and reaching a stage of aggressive fearful warrior.

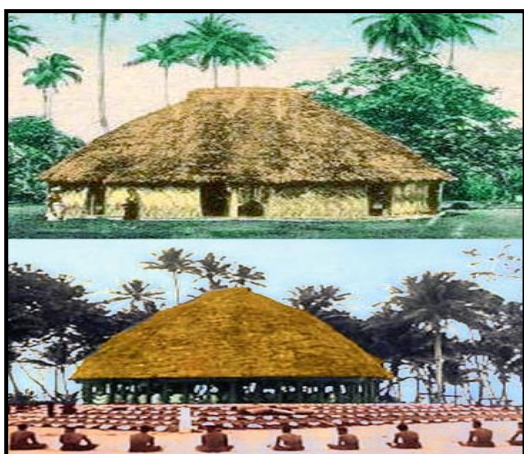


Illustration 11.1.2.7I: Social gathering in front of the *haus man*.

In some societies, men build spirit houses known as *haus man* in which women and children were not allowed. They guarded this house by making sure the traditional secrets kept are safe and secured.

Men view this house as an integral part of their daily activities. Their behaviours and conducts were shaped by the beliefs in the spirits.

As we know, our ancestors believed in traditional spirits. The spirits of the dead was called upon to assist the living. Magic and sorcery were often associated with spiritual beliefs. People did not separate themselves from the spiritual world; instead their livelihood was centered on the help of those spirits. Some of these spirits were said to be offered animal sacrifices by our ancestors. The spirits returned with abundance of blessings.

Each tribe and society believed in their traditional spirits. Their successes in life such as abundance of food harvest or the gift of having many sons and children were seen as deeds by those spiritual gods. When a woman becomes barren, it was perceived as a punishment from those gods that they believed in. Occasionally our ancestors show their appreciation to those gods by leaving behind some food in the garden, which eventually rots away. This is for their gods. Certain rituals and initiations are performed to please their gods.

Food was also roasted on the open fire and cooked with stones which are known as *mumu*. This is the common highlanders' method of cooking today. This picture depicts the preparation of cooking food with stones in an open pit. A normal highlands way of cooking that is still practiced today during feasts and special gatherings.



Illustration 11.1.2.7m: Preparation of highlands mumu and heating up stones for the 'pit' mumu.



Illustration 11.1.2.7n: Typical appearance of highlands man

In some Melanesian societies men covered their private parts only while the rest of the body was uncovered.

Women also used special leaves and traditional ropes to cover up their body parts. As time passed, they eventually developed the knowledge of bark clothing and grass skirts.

Head dresses were made using bush mosses and traditional tree barks woven by women. They also used these barks to make bilums to carry babies and to transport food.

There was no formal clothing worn by our early ancestors. It is evident that in most societies people used some form of clothing to cover their private parts. In Melanesian societies people wore '*astanget*' for men and '*gras sket*' for women and girls. Bark cloth and leaves were used to provide protection against the weather.

All societies used some form of headdresses, arm bands, shells and other decorations for singing and other ceremonial exchanges. In this way we regard that a custom and tradition was slowly built that gave an identity to the people.

Goods and food such as protein were stored in wild bamboos, clay pots and baskets for future use. Proteins were kept in a bamboo over the smoke. These foods were stored for more than a month and continue to provide balanced meal for a long period of time. During hunger seasons some foods such as pork and *pandanus* smoked in the house provide relief food supply. There were always surplus food resources available from their local surroundings.

Bamboo is a useful plant in Papua New Guinea. In the early days our people used bamboo as containers to fetch water for cooking and drinking. It was also used on the walls and floors of houses.



Illustration 11.1.2.7o: Bamboos were useful food storage. *Above* Clay pots were used for cooking mainly in the Milne Bay, Oro, Morobe and the Gulf provinces.

Weapons

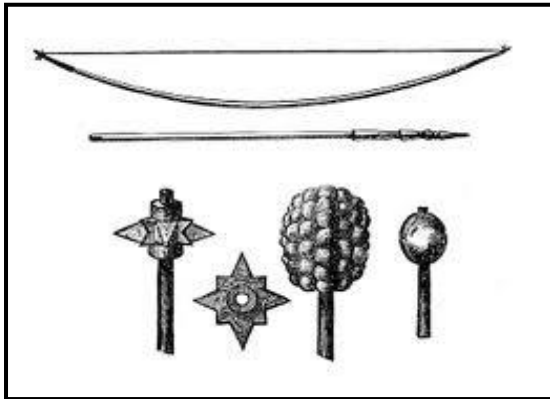


Illustration 11.1.2.7p: Examples of traditional weapons

Bows and arrows, war shields, spears and stone clubs were used for hunting and fighting. The most important materials used were wood, stone and bones of animals and humans especially for spears that were really dangerous.

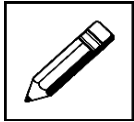
Weapons were often decorated with paints for various reasons. Some were done to frighten their enemies while others did it in association with their spiritual beliefs.

Now, read the summary.

Sub topic Summary

- Customs and traditions were accepted ways of doing things in a particular society.
- Papua New Guinean customs and traditions include marriage, death and birth ceremonies, oral traditions, art and craft, and traditional spiritual beliefs.
- Individual societies behave differently according to their values, customs and traditions.
- The end goal of respecting customs and traditions, and abiding by the rules of society is to maintain peace and harmony, and preserve our customs and traditions for future generations.

Now do Activity.

**Activity 11.1.2.7**

-
1. How do you think the daily life of the early people was like? Briefly describe in your own words.

2. Explain three uses of 'bamboo' in the traditional society.

3. Write True or False to the following statements.

- (a) Bamboo is only useful to people in traditional societies. _____
- (b) Individual societies behave according to their values, customs and traditions. _____
- (c) Christian missions put a stop to bad customs, traditions and practices. _____
- (d) *Haus man* were strictly for men to reside in, women can only visit during the day.

- (e) People sometimes still make fire using the traditional method in villages. _____

Check your answers at the end of sub unit 11.1.2.



Answers to Activities 11.1.2

Activity 11.1.2.1

1. Geologists are scientists who study the earth and its formation. They study the different rocks and remains of living things that lived millions of years ago.
2. Australia and the island of New Guinea
3. The Sunda land
4. The Ice Age was a time when the earth's climate was cold. During this time the polar ice caps were frozen and the sea level was low. The low sea level made it easy for people to cross over large areas of land and sea using some form of sea craft or raft.
5. The Wallace Line or Wallace's Line is a faunal boundary line drawn in 1859 by the British naturalist Alfred Russel Wallace that separates the ecozones of Asia and Wallacea, a transitional zone between Asia and Australia.
6. Ethiopia in East Africa. Scientists believe human beings came from apes.

Activity 11.1.2.2

1.
 - (a) Two
 - (b) First wave of migration
 - (c) They settled in the highlands of PNG and some went southward to Australia
 - (d) About 6, 000 years ago
 - (e) They settled along the coast and islands in PNG, some settled in Micronesia, Polynesia and other Melanesian countries.
5. Completed table should look like this.

Race	Continent	Region
Negroid	Africa	
Mongoloid	Asia	
Austroloid (Australian Aborigines)	Australia	
Melanesian		Pacific/Oceania
Polynesian		Pacific/Oceania
Micronesian		Pacific/Oceania
Caucasoid	Europe	

Activity 11.1.2.3

1.
 - Stage 1: Hunting and gathering
 - Stage 2: Hunting and gathering, and a settled little hut or cave
 - Stage 3: Making gardens, plant crops and raise animals which led to settling in one

place more permanently.

2. Kuk drainage evidence is important because the evidence places Papua New Guineans as some of the first farmers in the world. Farming and village lifestyle started in this region before anywhere else.
3. People changed the environment through their search for food and other survival needs. They hunted, cleared land, and developed a culture and a settled or village lifestyle.
4. Culture is a way of life of a group of people.
5. The Stone Age is divided into three different periods. The Stone Age is also referred to as Paleolithic. During this time the first stone tools/artefacts were produced about 2.5 million years ago to the end of the last Ice Age, about 9, 600 BC. This was the longest Stone Age period.

Activity 11.1.2.4

1.

Highlands Province	Type of evidence	Date of existence	Importance
Eastern Highlands	Lamari village	18, 000 years ago	Settled way of life
Eastern Highlands (Kafiavana)	Rock shelter and paintings	-	1. Paintings tell us the type of activities they engaged in. 2. Built shelter for purpose of remaining in one place.
Western Highlands	Kuk drainage ditches	10,000 years ago	Papua New Guineans could be the first early gardeners in the world.
Western Highlands (Baiyer River)	Yuku Rock Shelter	12, 000 years ago	Built shelter for the purpose of remaining in one place.

2. Places in Melanesia that have evidence of lapita.

-Provinces in Papua New Guinea that have lapita include Manus, New Ireland, East and West New Britain provinces, North Solomon.

Other places or Melanesian countries include:

- Solomon Islands
- Vanuatu
- New Caledonia
- Fiji

3. -Arnhem Land (North Australia) about 20, 000 years ago
-Undated sites in both North and South Australia

4.

(a) True

- (b) True
- (c) True
- (d) False
- (e) True
- (f) False

Activity 11.1.2.5

1. Linguists are people who study the languages and its variations.
2. Austronesian and non-Austronesian languages
3. The Austronesian languages are widely spoken along the coastal areas and islands
4. regions while the non-Austronesian languages are widely used in the highlands regions
5.
 - Inter-marriage
 - Cultural change caused by movement of people
 - Rapid changes caused by technology

Activity 11.1.2.6

1. Any male in the clan could become a 'big man' if he had the required leadership qualities. This means anybody who has power, authority; command and influence can become a big man.
2. Some of the leadership qualities:
 - Physically strong
 - Hard working
 - Wealthy
 - Powerful orator
3. Cultural diversity means having a different and unique culture from another.
4. State True or False.
 - (a) True
 - (b) True
 - (c) False
 - (d) False
 - (e) True
 - (f) True
 - (g) True

Activity 11.1.2.7

1. Their daily life was based on everyday survival skills in roaming the uninhabited land in search for food and shelter.
2. Uses of bamboo:
 - Cooking food
 - Fetching and storing water
 - Musical instrument
3. True or False.

- (a) True (b) True (c) True (d) False (e) True

Sub unit 11.1.3: Traditional Trade

Sub topic 11.1.3.1: Traditional Systems

Welcome to 11.1.3 *Traditional Trade*. In the last sub unit, you discussed the Prehistory of the people in the island of New Guinea and the Pacific as a whole. In this sub unit, you look at Traditional Trade between different groups of people within the country.

By the end of this sub topic, students should be able to:

- Define traditional trade and barter
 - Identify and explain who takes part, the type of goods exchanged and where
 - Differentiate between the different types of traditional trade that occurs within PNG
-

Trade refers to the exchange of goods and services. It can be either the use of money or exchange of goods. Sometimes people trade one good for another which is known as barter.

Those people who take part in these trades do it for several reasons, which are:

- economical systems
- survival
- established important social links

They needed food for survival as such they exchanged taro for sweet potato. While others who had surplus sago exchanged with yam. This is the simple barter system done purely for survival. A good example is the Hiri Trade by the *Motuans* of Central with Kerema people of Gulf Province who exchanged pots for sago.

There was trade among people everywhere. Trade linked the highlands of Papua New Guinea with the coastal smaller offshore islands. There was trade for different items and it has its own purpose. Trade for obsidian (a glass like volcanic rock used to make tools and weapons), pottery, shells, birds of paradise feathers, salt, oil, stone axe blades and food item.

There is evidence of sea shells reaching the highlands at least 10, 000 years ago. We have archaeological evidence about trade in obsidian and pottery between Papua New Guinea and other South Pacific islands at least 3, 000 years ago.

There was also important trade between Cape York Peninsula in Australia, Torres Strait Islands and New Guinea. Shells from Torres Strait were traded into the highlands. There is so much evidence that canoes made from Gulf of Papua were traded with Torres Strait Islanders as well as exchange of marriage and tribal warfare of headhunting.

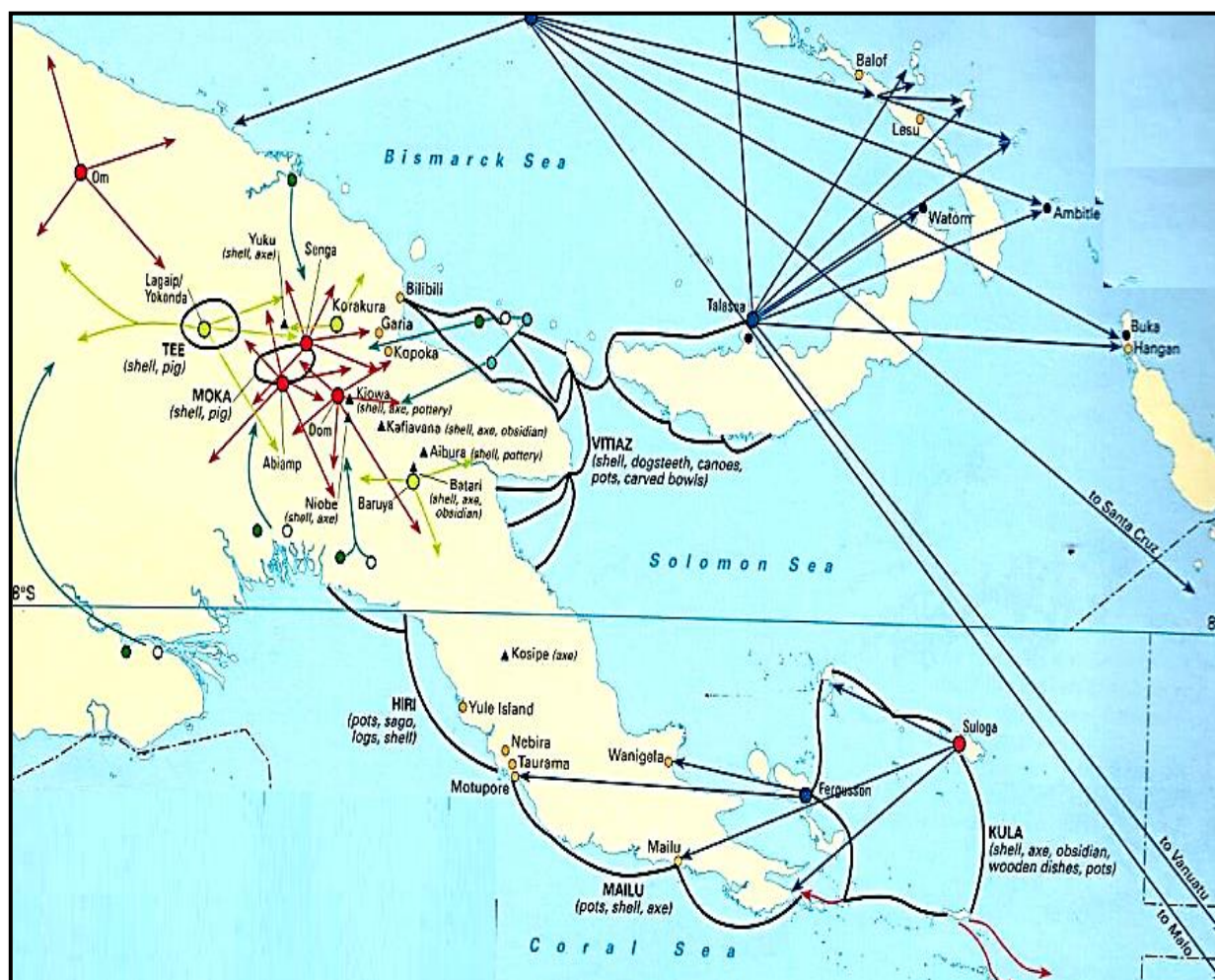
In the process of trade, there was a tremendous movement of people from Gulf into Torres Strait for the purpose of trade and that has left behind a big number of non-Austronesian speaking people in eastern islands of Torres Strait.

Meeting between trading partners was one of the ways in which introduced food items were spread such as sweet potato into the islands of New Guinea. Sweet potato, a staple food source in New Guinea was introduced from South East Asia. It is widely accepted that sweet potato has its roots from South America. It was transported by Spanish and Portuguese explorers between 16th to 17th centuries from South East Asia. From there it seems to have spread rapidly into the western part of New Guinea, and was taken into the highlands of New Guinea. It eventually reached the Pacific.

In trade people exchanged valuable items that were seen as important for the community. It also created new relationship and sometimes these relationships were made firm through inter-marriage. When people needed a particular item in their local surrounding they seek others assistance to supply them to reciprocate whatever the demand was. In a way it is like helping each other to satisfy their needs and wants.

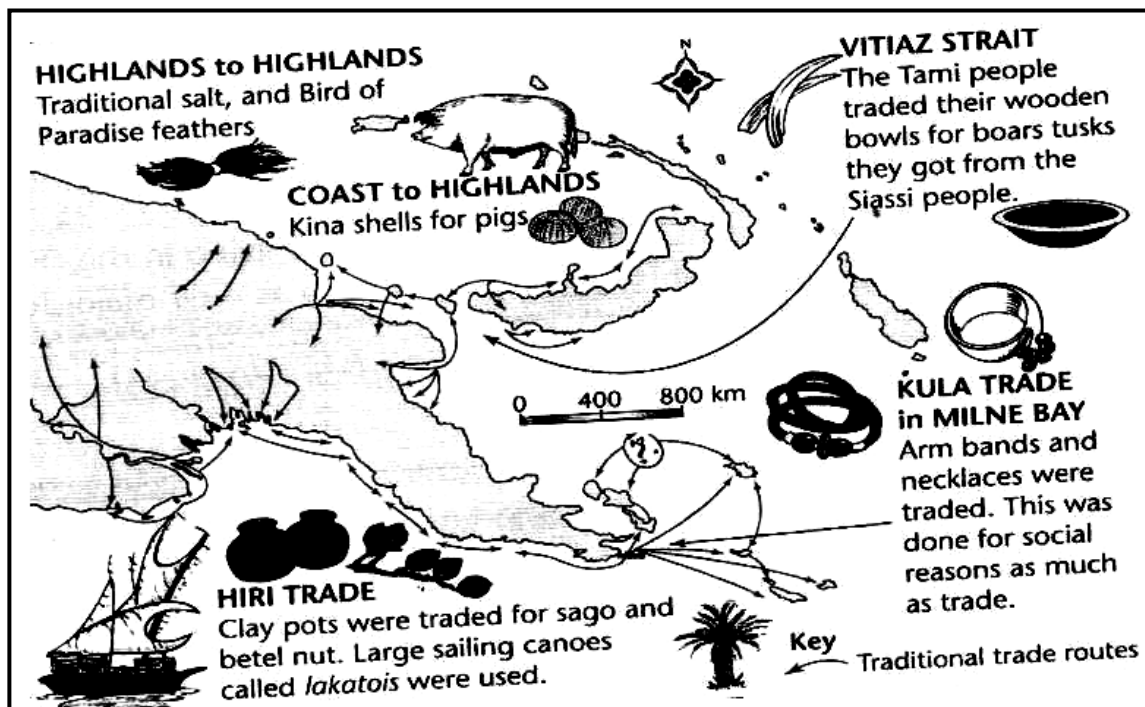
There is also evidence of trade among the islands of Melanesia. There was trading between the highlanders and the coastal people of Papua New Guinea. Sea shells were used as traditional money in the highlands. For instance, shell kina was used as money by the Southern Highlanders. It was obtained during trading with stone axes.

The following map illustrates the traditional trade systems in Papua New Guinea.



Map illustration 11.1.3.1a: Traditional trade patterns in Papua New Guinea

The **Hiri Trade** system lasted over many generations and the values of goods to be exchanged were clearly established. Until the WWII, the Hiri Trade Cycle was a major expedition. It occurred between October and November where the men from Motuan origin took the trip across the Gulf of Kerema to exchange clay pots with food staff as sago. Between December and January depending on the prevailing wind they (Motuans) returned with sago and yam. Sago provided food during the dry season.



The Motuans built traditional canoes called the Lakatoi to be used for this seafaring trade. These canoes were specially built with certain rituals and traditional songs and initiations. It was designed in such a way that wind directions were caught easily to cross the oceans.

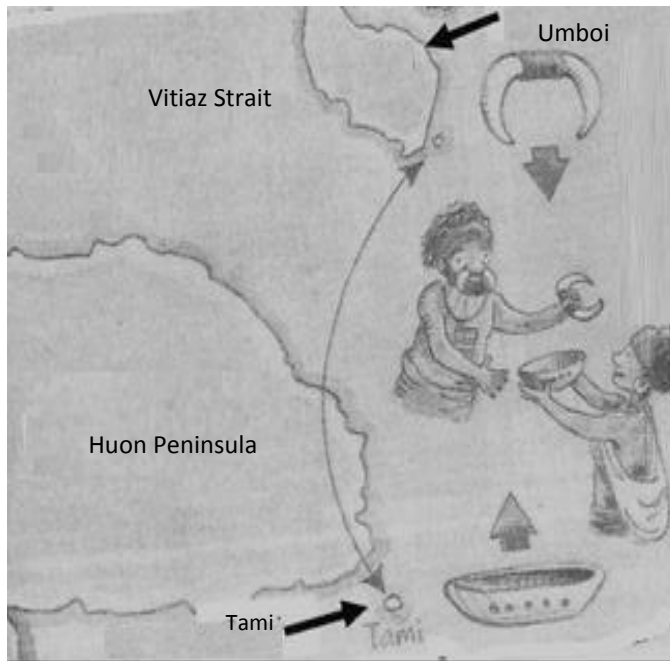


Pots used in the Hiri Expedition



A lakatoi used in the Hiri Trade

THE VITIAZ TRADE ROUTES

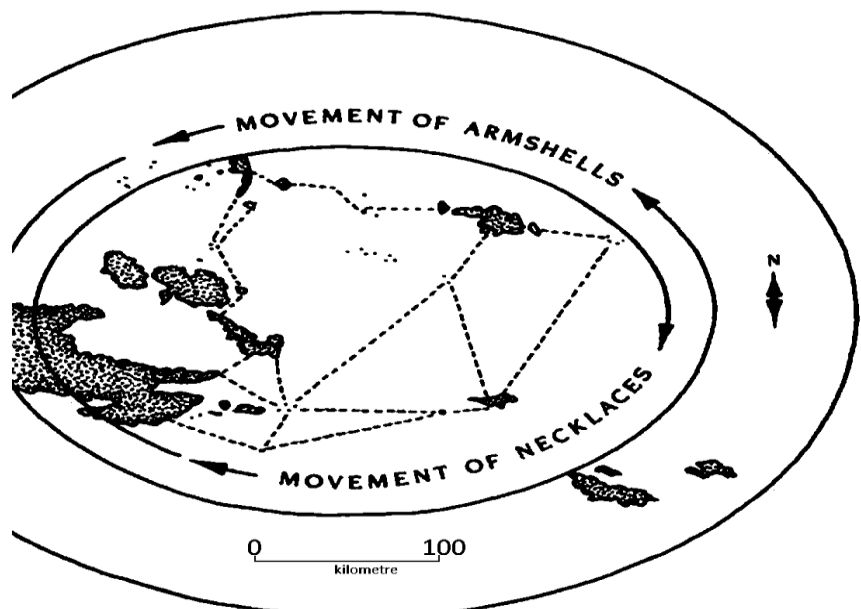


The Vitiaz Trade was between the people of Tami and Siassi Island of Morobe Province as well as the highlands nearby. The Tamis of Finschafen exchanged their famous wooden bowels for boar's tusks, dogteeth, shell, canoes, curved bowls and pots. People needed others to survive and so exchange and trade played important roles in satisfying individual needs and wants. This trade also connected some people from the highlands Papua New Guinea. It also built social and economic relations, where people were able to interact with others from different cultures.

The **Kula Trade** is another well-organised trading expedition in the Milne Bay Province. Kula trade involves the changing of pottery, stone tools, food and ceremonial shells. They exchanged highly valued red shell necklaces and white shell armbands. This system of trade was mainly in the Trobriand Island. The Kula expedition occurred twice a year. This trade was to establish social links.

CIRCULATION OF ARM SHELLS IN THE KULA TRADE

This map shows the circulation of the arm bands and necklaces in the islands and the mainland. Some of these shells were discovered around the Huon Peninsula; therefore, the islanders may have had trade encounters with the mainland people. These necklaces further ended up in some islands in the North Solomons so this trade also extended far and wide.



These trading systems greatly influenced the early people's lifestyle. For example, intermarriages created mixed cultures and changed languages. As a result, new knowledge and skills were developed where people became more talented. They were able to meet new people and study their culture.

Lapita Pottery is a decorated and specifically designed pottery. It was discovered in New Guinea at a place called Watom Island near Rabaul in East New Britain Province. Many archaeologists believe that Lapita pottery was brought to our country by Austronesian speaking people. Lapita pottery has now been found in many islands from the Bismarck Archipelago to Fiji.

It is presumed that traces of Lapita pottery mark the trail of the ancestors of the Polynesians. From this evidence we believe that this pottery was traded and carried across the Pacific into the Melanesian islands.



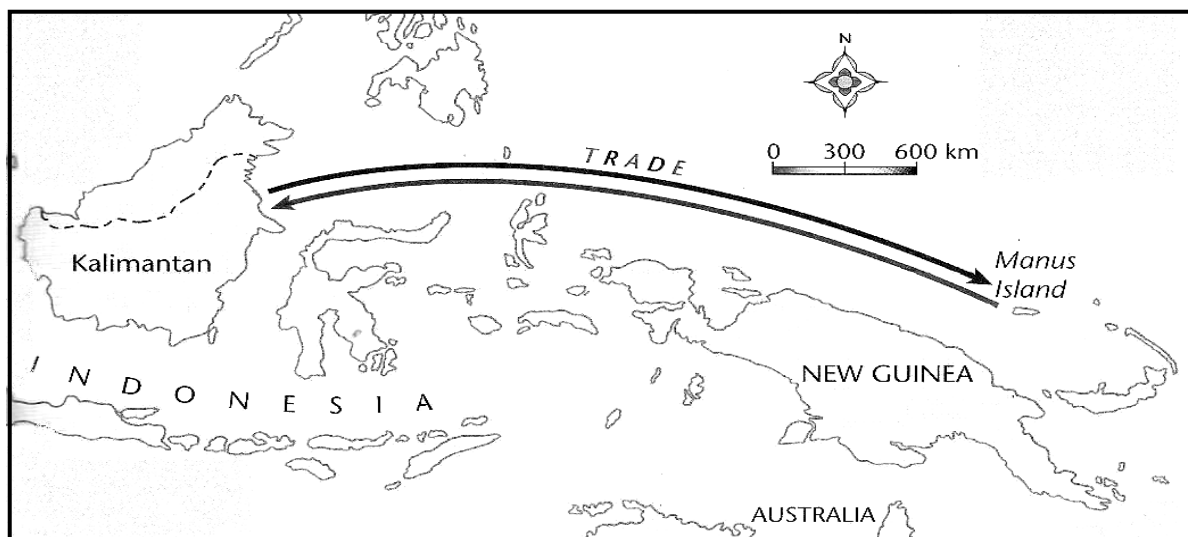
Lapita Pottery, New Caledonia



Fragments of Lapita, Papua New Guinea

Trade is one way people came to encounter the cultures and traditions of each other. Trade gave opportunity to the people to make long lasting relationships and migrations took place due to these trade relationships. When hit or faced with disaster people migrated to live with their trading partners. In this way, they began to settle permanently where mixed cultures developed.

TRADE BETWEEN KALIMANTAN AND MANUS



There is sufficient amount of evidence to prove that a trade also took place between the people of Kalimantan in Indonesia and the New Guinea islanders of Manus. From the evidences provided by anthropologists, we discovered that the Kalimantan people traded stone axes with shells from the Manus islanders. In this trade, there was movement of people where cultures were exchanged as well. This means trade was not just confined

within Melanesia and the Pacific only, instead our people were also engaged with Asians through trade.

In the highlands of New Guinea, Engans called it '*Tee exchange*' in which hundreds of pigs were displayed, killed and given away to neighboring tribes. The pig killing is one of the biggest ceremonies on the mainland of New Guinea. The tribal pig killing is done annually during Christmas to commemorate special events like death or opening of new 'hausman.' These huge celebrations involve giving away pig meat to distant relatives as credit to be repaid later when their turn comes. It is like putting a 'dinau' in pidgin.

The Engans also traded salt with oil with the people from Lake Kutubu. The oil in those days were used for traditional '*bilas*' or decorations of body parts during singings. It was a demanding item so the Engans travelled long distances into the Southern Highlands Province to exchange. These early people were able to make salt from certain plants and stones which were used to give flavor to food.

The Melpa people near Mt. Hagen in Western Highlands practiced a certain exchange called '*moka*' and in Mendi in Southern Highlands, it is called '*mokink*'. In these gathering people did some kind of exchange or barter systems. Whatever it is, all these exchanges serve different purposes. As discussed, some of these exchanges served economic purposes, others for survival and relationships.

This was their way of life. From these trade links, we realise the formation of a complicated culture built around the Melanesian societies. Some highlanders traded surplus kaukau with the pandanus nuts which is widely known in the highlands region.

In our everyday lives we are involved in some form of exchange or trade. We trade money with goods from the stores or exchange knowledge with money. Trade is not new to us it has been happening in the past and it continues today.

Without trade all our needs and wants cannot be met therefore; people reach out to others through trade. Today we trade our natural resources with the manufactured goods from other countries. The developed countries need raw materials and we need the finish product or manufactured goods.

In this scenario, we continue to trade in our everyday lives. We are not isolated but we are interdependent.

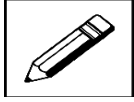
Now read the summary.

Sub topic Summary

- Trade is the exchange of goods and services.
- Barter is the exchange of goods for other goods.
- Trade takes place for several reasons.
- There are different trade patterns by different group of people.
- The common trade systems in Papua New Guinea include: Hiri Trade, Vitiaz, and the Kula Expedition.
- People from Manus traded with island people of Kalimantan in Indonesia.

- In the highlands, there existed different trade patterns as well amongst different groups of people.

Now do Activity.



Activity 11.1.3.1

1. What is Trade?

2. Which people were involved in the Hiri and Kula Trade?

3. What types of goods were traded in the Hiri Trade?

4. State three reasons why traditional trade took place.

5. Refer to Map 11.1.3.1a and answer question. Which items or goods were exchanged between the highlanders and coastal people of New Guinea?



Answers to Activities 11.1.3

Activity 11.1.3.1

1. Trade is the exchange of goods and services. People can either use traditional money or exchange good(s) for another good which is known as barter.
2. The Hiri Trade was an exchange between the Motuans and the people of Gulf. The Kula Trade was an exchange between the trobriand people and other islands in the Milne Bay Province.
3. The Motuans exchanged their clay pots for sago and yam from the Gulf people.
4. -They wanted to satisfy their needs and wants
-Exchange items that they do not have in their area
-Build social relation and interaction with others.
5. The highlanders traded with their neighbors the following items;
Traditional salt between Engans and Southern Highlanders, bird of Paradise flumes, Moka, Tee in Enga, Monlik in Southern Highlands

Glossary

Austronesian language	The Austronesian languages are a language family that is widely dispersed throughout Maritime Southeast Asia, Madagascar and the islands of the Pacific Ocean. These languages are spoken in New Guinea islands and the other parts of the Melanesia and the Pacific.
Chieftaincy	a region or a people ruled by a chief
Egalitarian	believing in or based on the principle that all people are equal and deserve equal rights and opportunities
Homo sapien	Homo is the human genus, which also includes Neanderthals and many other extinct species of hominid; Homo sapiens is the only surviving species of the genus Homo.
Ice Age	a glacial episode during a past geological period
Non-Austronesian language	Languages that are found in mainland New Guinea and mainland coastal areas
Norms	Standards, rules of a society
Prehistory	The time before written records were kept
Wallace Line	The Wallace Line or Wallace's Line is a faunal boundary line drawn in 1859 by the British naturalist Alfred Russel Wallace that separates the ecozones of Asia and Wallacea, a transitional zone between Asia and Australia.

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