Introduction

This book is an attempt to map out African history up to the beginnings of the Trans-Atlantic slave trade at the start of the 15th century and to enable the reader to have a basic understanding and grasp of Africa’s past and how from the beginnings of Ancient Egypt, Africa has been helping to shape and transform the world that we live in. For instance, in the Book of Genesis in the Old Testament, 2 out of the 4 rivers which are said to mark out the boundaries of the Garden of Eden are located in Africa and throughout the Old Testament there are many references to Africa.

Though Africa is the world’s second largest continent, it was only from the beginnings of the 1960’s that certain academics realized the historical importance of this vast continent.

At school during geography and history lessons one looked at maps of the world and saw country after country and continent after continent painted pink, signifying that it was part of the British Empire and that its core value systems were the same as ours. I also distinctly remember doing a primary school project on Ancient Egypt, but its history was seen as separate from the rest of Africa. Its identity was other then African.

During this period of the later 1960’s concepts such as freedom and democracy were seen as been embedded in Western values and our way of life. Yet as a result of events such as the Sharpsville Massacre in South Africa where unarmed African civilians were shot down in cold blood by white South African police and other radio and television news items and newspaper editorials on the American civil rights movement, I and many others began to question whether Europe or the USA was truly democratic.

As the 1950’s came to an end, the revolution in Cuba, led by Fidel Castro was reaching its end game. I was bought up on a diet of The Daily Telegraph and The Sunday Times which were both extremely conservative newspapers. In these newspapers Fidel Castro was seen as a threat to our cherished notions of democracy and freedom but when revolution in Cuba was placed alongside the apartheid system in South Africa and the lynching and segregation of African-Americans which was part of life in the American deep south I personally started to question just how democratic we were in the UK and in Europe. How could the USA on the one hand say that it fought for freedom and justice during the Second World War yet at home
and even on the battlefield discriminate against an individual because of their race and the colour of their skin.

During the mid 1950’s I was starting to develop a life long interest in music and my Saturday morning routine would be to spend an hour listening to Children’s Favourites with Uncle Mac on the radio, hoping to catch a tune that I liked. More often then not at the end of each show I would feel slightly let down and disappointed. Singers like Elvis Presley had power but left me feeling that something was missing. The songs were alright but they left me with a sense of disappointment I would try my hardest to appreciate this type of popular music but hearing Ray Charles singing ‘What I Say’ for the first time blew me away. The man was singing from the bottom of his heart. During the 1960’s, partly as a result of pirate radio DJ’s such as Tony Blackburn playing Tamla Motown, black music became more accessible and Saturday afternoons were often were spent in Archie’s coffee bar in the port of Folkestone in Kent, listening to their eclectic juke box spinning the tunes of Prince Buster, the Skatellites, Marvin Gaye and Tammi Tyrell and other soul artists like Otis Redding. Through listening to these kinds of music, some of which tackled the racism and oppression that still existed in the USA and the Vietnam War, I began to read books documenting the Civil Rights Movement. Fiction by African American Authors such as James Baldwin and the poetry of Leroi Jones and also reading books borrowed from the local library on African history. With this awareness I will always remember discussing with a lecturer from London University who was staying at my parent’s house for the weekend democratic structures that existed in ancient African kingdoms. As I enthused more and more on this subject, and probably got quite carried away with my forthright opinions she became more and more animated and finally in a fit of anger seemed to leap out of her arm chair in disgust, vehemently denying that the African continent, prior to European colonization possessed any type of democratic or civilized structure.

It is only since the 1960’s that mainstream academic attitudes towards the historical narrative of Africa has changed. This has partly come about through in-depth archaeological surveys which have revealed an otherwise hidden past and also through the efforts of African historians and academics whose efforts have helped to change our understanding of African history.

This book is partly aimed at teachers so that they have a wider grasp of African history which so often is immediately associated with the trans-
Atlantic slave trade or Ancient Egypt and even in the 21st century there is so much ignorance about Africa and the book is intended to provide a framework from which through further reading one would be able to develop a far greater understanding of the role of Africa in shaping today’s world.

**African Geography**

Africa is the world’s second largest continent and also the second most populated country in the world. The population of Africa is over 900 million people making up 14% of the planet’s population. Among the 50 independent African countries there are vast population differences. Nigeria, for example is populated by 150 million people while Niger and Namibia are much more sparsely populated with populations below 5 million persons. As well population differences Africa is comprised of a wide range of environments. Vast expanses of arid and potentially hostile and life threatening deserts, massive areas of tropical rainforests, savanna grasslands teeming with animal life, huge areas of treacherous swampland, home to tropical diseases such as malaria and snow capped mountains such as Mount Kilimanjaro in Kenya. Africa is also home to a wide variety of flora and fauna. One suggested classroom activity could be to draw up a list of the flora and fauna to be found on the African continent. The actual geographical size of the African continent is able to encompass the entire land mass of the USA, China, India and Argentina which in themselves are huge countries in their own right. The continent of Africa is covers a geographical area of 11.6 million square miles and the journey down from the north to the southern most point is about 5,500 miles.

The Sahara Desert lies in Africa. This is the world’s largest desert, and from its western fringes on the Atlantic Ocean, is part of an extensive desert belt which stretches east, all of the way to China. The Sahara Desert itself covers an area which crosses the borders of Morocco, Algeria, Tunisia, Egypt and Sudan. The actual distance between the western edge of this desert on the Atlantic Ocean and its eastern fringe along the Red Sea coast is 5,700 km’s and covers an area of 8.6 million square kilometers taking in parts of the stunning Atlas Mountain range and the Sudanese Sahel region. The physical environment of the Sahara Desert is extremely harsh. The average annual rainfall is below 25 cm’s and during the daytime temperatures can rise to as much as 58 degrees Celsius in the shade. Temperatures during the day and night vary considerably and after sunset
can become very cold. Many types of flora and fauna can be found in this harsh desert environment as well as vast quantities of oil and salt which for many centuries played a major role in the development of a viable trans-Saharan trade network. At one time a kilo of salt could purchase its same weight in gold dust. Today in the Sahara Desert, Libya accesses another valuable harvest. Sub-soil water which is then pumped to its many cities and towns. This represents a new and desperately important harvest where water is becoming an extremely precious commodity and valuable natural resource.

Africa’s raised rock plateau was formed sometime between 3,600 million years and 500 million years ago. When this time scale is placed against the historical fact that forest agriculture in Africa is around 15,000 years old, one is made to realize how relatively modern our own history upon planet earth is. The continent of Africa is extremely rich in minerals and some of its mines are thousands of years old but the agricultural soil in many of its regions is very poor. This has meant that African farmers have had to be very inventive in working this hostile environment in order to grow sufficient crops to feed and maintain local communities. The rock structures in Africa differ from other continents, such as Asia which is dominated by the Himalayan mountain range because very few of these prehistoric rock structures folded into mountain ranges. Africa’s existing climate would have been totally different if a chain of mountains ran the length and breadth of the continent. It is estimated that between 23 million years and 5 million years ago a series of faulting and volcanic eruptions occurred in East Africa which led to the formation of rift valleys and highland areas which in turn caused a disruption of the lateral climate belts and the creation of very different historical patterns for West and east Africa. They are seen as being very separate and set apart from one another in both a geographical and historical perspective.

Commencing at the equator, bands of temperature run north and south across the African continent. Large expanses of equatorial rain forest on both sides of the equator dominate the landscape. Eventually this forest area thins out and merges into savanna grassland which then form extensive desert regions but along both the north and south coastal strips there exists a Mediterranean type climate.

Africa’s coastal northern strip is bordered and linked directly to the Mediterranean Sea. Historically, this whole region is linked to the various
Ancient Egyptian dynasties, the Phoenician city-state of Carthage and the Greek and Roman empires. South of this region lies the Sahara Desert which covers an area from the shores of the Atlantic Ocean across to the Red sea. The east to west zone south of the Sahara Desert is comprised of many diverse environments. There are semi arid regions in the north lying next to the Sahara while much further to the east in Ethiopia there are fertile highland and green valleys while on both the east and west coastal areas are treacherous disease ridden swampland. Located within this region, south of the Sahara, the medieval kingdoms and empires such as Mali, Bornu and Songhai were located as well as the gold mines of Wangara which played such a vital and important role in the trans-Saharan trade routes. From early on in the 15th century through till the 19th century the African west coast provided the trading posts for European slavers and companies who amassed vast profits from the trans-Atlantic slave trade and through other commodities such as gold. This trade was one of the catalysts which helped to change the agricultural and industrial landscape of the United Kingdom. Slaves shipped across the Atlantic from these trading posts also provided the indentured workforce for plantations in the Americas for a number of centuries and profits accumulated from these brutal regimes still help to shape contemporary American politics. Also it is in Africa that some of the causes for the two world wars of the 20th century can be found, leading to the slaughter of millions of people, and the holocaust where much of the European Jewish population and culture died in concentration camps and mass killings. Colonial rivalry between England and Germany prior to the First World War was one of the causes of this conflict. The peace treaty signed at Versailles at the close of the First World War sowed the seeds for the rise to power in Germany of Hitler and the Nazi party in the 1930’s.

The equatorial rainforest of the Congo covers an area from Africa’s west coast to the Mountains of the Moon and on to the Great Lakes in the east. Within these forests there are great apes such as gorillas which as a result of poaching and illegal logging have become endangered species. Pigmy people also live within this environment and they represent one of the oldest surviving groups of African people. The equatorial rainforest also acts as a physical barrier diving the east of Africa from its western half and the northern region from the southern region. The remaining area of Africa is L-shaped and covers a low altitude coastal region linked to a massive interior plateau which flattens out between 3000 ft and 5000 ft above sea level and in this region a multitude of varying climatic conditions exist.
Monsoon winds dominate the east coast of Africa. During the first half of the year they blow in a southerly direction and in the second half switch to a northerly direction. It is along this eastern shoreline that the oldest remains relating to early man have been found though recently in September 2009 it was announced that archaeological remains of early man had been found in Georgia so this period of man’s evolution is being constantly rewritten and revised. This coastline faces the Arabian peninsular and the countries of India, Indonesia and China. Large primeval ferns called cycads, a plant similar to ferns which once grew in large ancient forests can be found as well as the enormous baobab tree whose trunk has a diameter of over 100 ft. Branches of this tree grow at the top of a baobab tree’s trunk and then fade to nothing. This tree is a survivor and relic of these ancient primeval forests and can have a natural life span of over 1000 years.

**Classroom Activities**

1. Map out the belt of deserts from the Sahara to China. Mark out the major towns and possible ancient trading centers. Working in small groups create a board game which can take one across this belt of deserts. Think about the terrain and the problems that would be encountered.

2. Divide the African continent into its various different geographical regions. Within each region identify up to 5 important facts such as climate, rainfall, environment, fauna and flora etc.

3. Create/make/draw simple bar graphs showing rainfall, temperature and other climate related themes across Africa. This information could come from text books in the school library, from search engines such as Google. Compare and contrast differences. Discuss in small groups how these different climates would affect the environment and life styles and the local economies.

4. Map out the river systems and name them. This information could come from an atlas or through a search engine.

5. Map out other transport systems such as roads.

6. Devise a board game using knowledge gained from these activities.

7. List as much different types of flora and fauna to be found in Africa today. Highlight the species which are endangered.
Origins of Man

Around 60,000 years ago it is believed that a small flotilla of boats set off from the coast of Africa and made a perilous 20 mile journey across the Mandab Strait in the Red Sea landing in Asia. At that time it must have felt like a remarkable undertaking and achievement paralleling the first moon landing in the 1960’s as they would have arrived on a previously unexplored continent completely devoid of other human life. This small group would be arriving on completely uncharted territory and moving through this virgin landscape would have been an awesome experience for this small group of adventurers and explorers. Why this group decided to risk their life’s by crossing this 20 mile stretch of water is still unclear but scientists have speculated that climate change linked to food shortages may have been the catalysts which spurred them to build a small flotilla, leaving the safety of their homeland to cross the Mandab Strait to Asia. It could also be the first recorded example of immigration and one direct result has been the spread of the human race across the entire planet. Since this date there have been 2000 generations and all other hominid groups such as Neanderthal Man became extinct and Homo Sapiens have become the most dominant hominid species.

Man’s journey started many millions of years before this perilous Red Sea crossing but it is a story which has only just started to emerge clearly during the 20th century. Through the chance discovery of a number of fossils during the last century which show evidence of the existence of organized human communities going back as much as 7 millions years ago, some scientists have come to the firm realization that the origins of mankind are to be found embedded in Africa. The recent find of an ancient man in Georgia put a slightly different perspective on this picture but does not change the main belief that mankind originated from Africa.

Before the first migration of this small group out of Africa several million years of human development had occurred on the African continent without any contact with other regions of planet earth. Africa can be seen as representing the cradle of civilization, the continent from which man first emerged and then evolved. There had occurred 60 million years of primate evolution prior to our upright ancestors detaching themselves from the rest of the primates and taking a separate evolutionary path. This process began with a hominid group breaking away from the main and dominant primate species, the Great African Forest Ape, the Gorilla and the Chimpanzee. This
breakaway group began to walk upright which enabled them to see further and have far better vision. As a result they became more aware of the presence of possible predators, automatically increasing their ability to survive in a possible hostile and threatening habitat. Also they developed the ability to carry food, tools or weapons in their free hands and over an evolutionary period became capable of constructing basic tools. Evidence has been accumulated that dates this split from other primates to 4 million years ago and that evidence of the use of stone tool can be dated to one and a half million years later. Change did not occur overnight. It was an extremely slow process so changes happening in today’s world like climate change and population increases are occurring rapidly and before our eyes. The introduction of stone tools marks the beginning of what is categorized as the Stone Age and this period continued even after the first known migration out of Africa. During the Middle and Later Stone Age periods a much wider and versatile range of tools were developed. Behavior became much more complex and there were a far greater range of cultural life styles such as the more organized hunter and gatherer, compared to the scavenger whose approach to daily existence and survival was far less structured. As the period of the Later Stone Age drew to a close, Africa was populated by people who resembled human beings as we know them today. Again it has to be stressed and remembered that this evolutionary process took place over many millions of years.

If one travelled back in time 3 million years ago and landed in the tropical savanna grasslands of Africa one would have encountered species of hominids inhabiting this region which covered an area of 12,000 kilometers starting in Senegal and running south to the Cape. These hominids occupying these savanna and forest grassland zones would have had regular opportunities in which to meet and interact. The area was also diverse in animal, plant and vegetable life making the daily task of survival much easier. With the onset of dry and less plentiful seasons the inhabitants of these savanna grasslands would have had ample opportunity to engage and experiment with other sources of fresh food and other possible life styles.

It was from this tropical grassland zone in Africa that evidence of Man’s ability to make and design basic and primitive tools first emerged, starting from around two and a half million years ago. Proof of tool making has been found preserved in ancient cave settlements located in the Rift Valley in East Africa. There had been major climatic and geographical changes around twelve million years ago which forced hominid groups to move into and
inhabit the tropical zones in Africa. Other major changes took place six and a half million years later. The basin of the Mediterranean Sea once again filled with water and the Arabian peninsular became separated from the African continent except for the area around Suez. Five million years ago Eurasia and Africa began to evolve independent of each other.

The late Miocene and Pliocene age was a crucial one in the evolution of hominids. Fewer genetic differences exist between apes and human beings than between apes and monkeys. The first tools that hominids started to make and use approximately two and a half million years ago were quite small. Often they were simply individual stones which had been altered and given a sharp edge. Tools from this time have been labeled Oldowan because of the number of prehistoric sites which have been uncovered around the Olduvai Gorge located in Northern Tanzania. Many of these sites discovered only after long and painstaking archaeological investigations are also located close to water sources. Water is an essential ingredient to sustain life and without the many water holes spread across the savanna belt this environment would have been unable to have been the breeding ground of such a diverse wildlife population.

Because so many of these prehistoric sites were located so close to water it can be assumed that the early hominid hunter/gatherers did not have the means or ability to carry water over any distance. Through the slow process of evolutionary development and the increasing widespread use of basic tools, man developed the skills and ability to catch and eat meat. Tools enabled these hunter/gatherer groups to plan out and exert more control over their everyday existence. Their home base provided the nucleus of their communal existence. Individuals left this secure base in search of wild game and food which was bought back to camp and shared out amongst the rest of the clan. Female members of the group it is thought developed strong bonds with the young but the existing social structures in place were non-monogamous. With the onset of the hunting season adult males would spend much more time away from these settlements. More structured hunting groups might have evolved as the hunting and slaughter of larger and more powerful animals could not have been achieved regular by individual hunters. Group co-operation would have been vital to successfully hunt for the loose community and this could have led to the formation of more structured hunting groups. It is thought that 75% of early man’s diet was plant based. These plants would have been gathered locally while the remainder of their diet was supplemented through hunting.
Hunters usually would keep to an area within 40 kilometers of their home base.

Gender determined individual roles within the communal group. Hunting was seen as an all-male activity. Women and young people tended to gather food locally and maintain and look after the home base. Night time was the most dangerous part of the day. This was when they were at their most vulnerable from attacks by large and ferocious carnivores. Large stones may have been gathered and stockpiled around their cave dwellings as a means of protection. Professor Leakey who was responsible for the discovery of many of these early sites around the Olduvai Gorge and who helped to change our perceptions of the early evolution of man, found piles of stones at many of these sites and believed that could have been placed there for defensive purposes.

Except for the past two hundred thousand years the rest of human history is known as the Paleolithic or the Old Stone Age. This was followed by the Neolithic period or the New Stone Age. By the end of this period, metals such as copper and iron were used in tools. Genetic research has concluded that all human beings have a common ancestor ten thousand times removed. It is believed that the roots of this common ancestor originated in Africa between sixty thousand years and twenty thousand years ago. Some of these ancestors would have been on the boats which made that crossing of the Red Sea into Asia as mentioned at the beginning of this chapter. Charles Darwin, author of the ‘Origin of Species’, writing in the nineteenth century, long before Professor Leakey and his wife made their series of discoveries in the Olduvai Gorge, wrote that,

“Africa would prove to be the homeland of human species.”

Charles Darwin’s beliefs are further backed up by a report in the Nature Magazine, published in 2003. It printed an article about an archaeological dig led by the University of California which discovered the skulls of two adults and a child close to the village of Herto, in the central Awash region of Ethiopia, a distance of 140 miles east of the main city of Addis Ababa. The three skulls were carbon dated to approximately one hundred and forty thousand years old and give further credence to support the theory that man has its roots in Africa. Also, as a result of this find a new category of human species was identified: that of Homo Sapiens Idaltu. Signs of burial preparations and of burial ceremonies were found in the same area as the
skulls as well as stone axes and other tools dating back to at least one hundred and sixty thousand years ago. As a direct result of these discoveries the period when plants were first domesticated had to be moved back in time because the team from the University of California uncovered evidence that the people of this region cultivated plants. Darwin also suspected that many important technological inventions and innovations originated in Africa during the earliest histories of mankind. Scientific proof since the 1950’s has confirmed these theories of Darwin. It is only in parts of Africa that evidence has been found that enables us to understand and comprehend the early evolution of mankind. These archaeological finds include old bones, fossils, stone tools and other implements.

The next section will attempt to map out the development and evolutionary process that man went through from a possible starting point of around seven million years ago. Before moving onto more contemporary African history I feel that it is important for students to grasp the enormity of this evolutionary time span and it could be interesting to place evolutionary theory alongside creation beliefs where life on earth happened exactly as described in the bible. Also drama could be a useful tool to explore evolutionary and creation ideas getting classes to re-enact what early man experienced as they started to walk upright and realized the potential of tools carved out of stone.

As previously mentioned much of our knowledge of this prehistoric past is based upon a few fossil finds scattered across a very wide area of east and southern Africa. No photographs or drawings exist of Homo Habilus. Our entire knowledge comes from a few fossilized remains and footsteps discovered. New fossils in the future are bound to be discovered and these discoveries will undoubtedly alter our historical perspective and understanding of the past. Also it is important to stress to pupils that the story of Africa’s history is still slowly unfolding but in the future new generations will come to realize the major role that this continent had in shaping the development of the world and in constructing our present environment.

In teaching this period of history one could introduce the first phase, which, as mentioned previously was called Oldowan. This period lasted from three million to one million years BC and the fossils and remains found were of a
people called Homo Habilus. Time could be spent just looking at the time span where as well as dwelling on historical facts, one could also enter into the Math’s curriculum. Homo Habilus people were small in stature and walked upright. Their brain capacity was relatively small and their life span on average was twenty years. They possessed the ability to make small pebble or chopper type tools which could have served a number of purposes such as sharpening digging sticks, to cut up dead animals, to cleaning animal hides as well as to soften up leather skins. Homo Habilus lived in small hunting and gathering communities.

The split between hominids and their nearest genetic relative, the chimpanzee, occurred between six and four million years ago. The climate in Africa, during this period was cooling down and the savanna grasslands were beginning to be formed. The first known hominids are known as Australopithecines and their fossilized remains have only been discovered on the African continent which furthers the argument that Africa is the birthplace of civilization. The earliest remains of this hominid species were found in the arid Awah Valley in Northern Ethiopia. These remains date back 4.4 million years. Much of their diet was vegetables. Their heads were large but they possessed a brain capacity a third the size of human beings. Australopithecines had the ability to climb and walked erect. Footprints from this group have also been found preserved in volcanic ash at Laetoll in Tanzania.

Knowledge of this specific group of hominids was first discovered by the South African anthropologist Raymond Dart. He stumbled across the skull of a 6 year old creature in a limestone cave near Toung in South Africa and realized that the skull possessed a number of human characteristics. The teeth were smaller than apes and had the characteristics of human teeth. Also the creature existed on a diet of meat and vegetables. The brain was larger than an ape’s but smaller than a human brain. He named this species Australopithecus or Southern Ape. Raymond Dart believed that this skull marked a transitory stage between ape and man.

During the 1930’s and 1940’s, other remains of Australopithecus were uncovered on the high veld of the Transvaal in South Africa. Right the way across many areas of East Africa it is now believed that many groups of these hominids existed. Between 1931 – 1959 Louis and Mary Leakey searched diligently for hominid remains in the Olduvai Gorge. This husband and wife team believed that the origins of man could be found in this region.
In these years their team discovered many stone-age tools and in 1959 made an important discovery which helped to alter our beliefs in man’s origins. In 1959 they found the hominid remains of ‘Zinj’, by the shores of Lake Turkana in North Kenya. Since this discovery many more hominid remains have been found in this region close to Lake Turkana, by the banks of the Omo River, in the Olduvai Gorge in Northern Tanzania and the Omo Valley in Ethiopia and in the Great Rift Valley which runs twelve hundred miles from the Red Sea into Tanzania and the Ethiopian Omo Valley.

Donald Johanson in 1974 alongside the Hadar River in Ethiopia discovered 40% of the ‘Lucy skeleton’. ‘Lucy’ existed three and a half million years ago. She was 1.07 metres tall. Had a face like an ape but a slightly larger brain than that of the chimpanzee. Analysis of her knee joints has proved that she was able to walk upright on her two legs. Lucy was categorized as A. afarensis. Some of her day was spent living and climbing in trees but the ability to walk upright occurred before any expansion of brain capacity. The ability to walk enabled ‘Lucy’ to spend time away from the forest belt and explore and get to know other types of environments.

The following year in 1975 Donald Johanson came across evidence of the existence of the first known family group. His group unearthed the remains of 13 people at Hadar in Ethiopia. They consisted of a mixed group of men, women and children. A year later Mary Leakey’s team found footprints of two adults and a child, close to an old volcano, south of the Olduvai Gorge. As they passed the volcano had been emitting volcanic ash. Soon afterwards there had been a rainstorm which caused the rock to harden, only to be found millions of years later by Mary Leakey and her team of archaeologists.

These Australopithecine hominids inhabited Eastern and Southern Africa between four million years ago and one million years ago. They could be sub-divided into a number of different species. Some of them were lightly built and had a mixed diet of meat and vegetables while other groups were much more heavily and stronger built but existed on a vegetarian diet. Their brain size was between 440cc – 550cc compared to an average human brain today of 1450cc. A human brain is roughly three times as large.

An interesting math’s classroom activity would be to find and weigh objects which are the same weight as those of the brain of hominids and to compare these with objects weighing the same as our modern brain.
During the 1960’s Dr L. Leakey found the skull of a new species of hominids in the Olduvai Gorge and along the shores of Lake Turkana. He classified this new species as Homo habilis or Able or Competent Man. Primitive stone tools were also found in the same area as these skulls which are thought to be between one and a half million years old and two and a half million years old. They co-existed with other hominid species, who though they are not our direct ancestors could have some genetic links with Homo habilis who were small in stature, walked upright, had quite small brains but these were still 50% bigger on average then Australopithecines and on average had a life expectancy of twenty years. They made pebble or chopper tools which quite possibly could have been used to sharpen digger sticks to cut up dead animal skins, to clean animal hides and quite possibly to soften up leather. Homo habilis also formed themselves into sustainable small hunting and gathering communities. Possibly a number of types of Homo habilis existed but they all ate a lot of meat and had hands with a finger and thumb which were able to grip and make basic tools. Quantities of chipped stone used for cutting have been discovered close to sites in the Olduvai Gorge.

The Acheulian Period forms part of the Late Stone Age. Today there still remains some confusion about the actual time scale of this period. Some say that it was between one million years to 200,000 years BC. The stone artifacts that Lois Leakey discovered in the Olduvai Gorge were 1,400,000 years old. These tools help to show the transition that occurred from Homo habilis to Homo sapiens. As time progressed stone tools developed and became much more sophisticated. The most common tool used in Acheulean culture was the hand axe. This axe was comprised of a flattish piece of stone which measured between 12cm and 25cm wide. This stone was then shaped into an oval design. A cutting edge went most of the way around or the axe was shaped more like a cleaver with the cutting edge running along the top side. These axes could also be used for digging, slicing and chopping as well as playing a part in religious rituals such as in the ceremonial burial of the dead. This hand axe was in use until 200,000 years ago. The sharp edges were formed by chipping flakes off volcanic pebbles. Some of the discarded flakes could have also been used to cut and scrape animal skins as well as for sharpening sticks but none of these tools were suitable for hunting. It was most likely that much of the meat that they ate came from animals they found which were already dead. Group hunting and seasonal camps became an established part of some of these early communities who discovered the means to use and control fire which
enabled them to roast meat as well as the fire providing warmth and comfort. The hand axe features are found to be similar across all continents adding to the theory that man’s roots emanate from Africa. Remains of early man have been found alongside hand axes alongside lake shores in East Africa. These early communities preferred to live close to water rather then in forest belts.

Acheulian Man existed in most areas of Africa except in the wet and dense forest regions except during periods of exceptionally dry and hot weather. Changes in their brain structure enabled man to live in a wider range of environments and during this period change became much more rapid. Remains of Acheulian Man have quite often been discovered in the Sahara Desert north of 15 degrees latitude. Other traces have been found on the Jos Plateau in Nigeria and in Ghana and Togo. Arrow heads have also been unearthed in North Africa, the Sahara as well as a few in Ghana. With the introduction of microliths, Stone Age tools became much more compact and far less cumbersome. Certain sites in Kenya and Sudan have also unearthed pieces of pottery which date back to 7,000 years BC. Pottery might well have been invented in Africa.

The first traces of an Acheulian presence in West Africa was discovered in the Flaene River Valley of Senegal. This find dates back to between 250,000 years to 180,000 years ago. Some archaeologists believe that some form of agriculture existed between 600,000 years and 60,000 years ago in parts of west and southern Africa. It has to be remembered that during this period the Sahara Desert was much more fertile than the present day. Major climatic changes took place during the Stone Age. The weather became colder and the polar ice sheet moved south into Europe, Asia and America. Sea levels fell right across the globe and in certain areas, land bridges formed there was once sea, allowing the movement of people and animals into other regions and continents. Africa did not experience an ice age, though on mountain peaks such as Mount Kenya snow and ice were to be found.

Another hominid, Homo erectus or Upright Man was discovered in 1975, east of Lake Turkana. These remains were found to be one and a half million years old. He had a brain capacity of 900cc to 1100cc. They used hand tools such as hand axes and provided some of the genetic material of our common ancestor. The biggest DNA variation occurs among the San bushmen of southern Africa. Some people believe that the San bushmen are
the direct ancestors of all human beings but some research since the 1990’s has disputed this claim.

One million years ago Homo erectus hominids started to move out of Africa. Homo erectus had better walking skills and possessed a rudimentary form of language. This marks the first known movement of hominids out of Africa and the beginning of the colonization of Europe and Asia. Other hominids could have followed in their tracks at a later period and that these migratory movements could have laid the foundations for future trade routes.

Homo sapiens or Wise Men evolved on the African continent between 200,000 and 100,000 years ago. This marked the final phase in the evolution of human beings. At the beginning stages of their evolution they had a brain capacity of 1450cc. By this period all other hominid species had died out and by 10,000 years BC Homo sapiens had spread to all major inhabitable areas of the world. There is still a debate as to which site contains the earliest remains of Homo sapiens who then developed into contemporary man. Remains dating back 100,000 years have been found in Ethiopia’s Omo Valley and in the Border Cave and at Klasies River Mouth in South Africa.

Homo Sapiens emerged during the Middle Stone Age. Some groups used bones in their tools and regional differences in tool design emerged. One change that took place was a new method for striking flakes from a prepared stone. This method created far less waste and they were also able to select and choose the best stones to use for tools. Obsidian, a tough volcanic glass like rock was used for hand axes and given a sharp edge. Obsidian axes made 200,000 years ago have been found in southern Africa. Vegetable glue and string was sometimes used to attach wooden handles onto stone tools. Hunting methods improved. They became far more effective. Fires were more frequently used and camps became much more organized. Shelters were created from branches, grass and stones and during colder seasons, caves were occupied as living quarters.

The Later Stone Age or the Sangoan, named after Sango bay in Uganda, began around 50,000 years ago with the development of the ‘microlith’ stone tool. Small stones were carved into precise points and blades. Some of these stones were shaped into triangles and crescents. The tools that they produced were capable of digging up roots and plants. Bows and arrows were developed during this period which drastically changed the nature of
hunting. Tools such as awls, needles, fish hooks, barbs for arrows and harpoons were sometimes crafted out of bone. A cultural life also started to manifest itself. Egg shell beads were used to make ornaments and rock art began to develop. Paints were constructed out of animal fats which were immersed in vegetable dye. The primary colours used were red, yellow and orange.

Border caves have been found in the north east area of the Zulu Kingdom. This cave complex has been found to have been occupied for 150,000 years and has been home to some of the oldest Homo Sapiens on the planet. The people who inhabited these caves were quite short, had ochre coloured skin and existed as hunters and gatherers. They are known as Bushmen and have occupied this region for over one million years but are not related to the Zulu people. They are comprised of clans and small family groups which follow the animal migrations from the mountains to coastal regions. They lived in caves or temporary shelters covered in animal skins which provided protection and cover from the changing weather conditions. The Bushmen also possessed a vast knowledge of the plants and animals of the region but never cultivated plants or domesticated animals. They classified plants into a number of different categories which were nutritional, medicinal, mystical, recreational and lethal. Through the observation of their rock paintings one is able to comprehend and articulate the Bushman’s spiritual connection with the animal world.

By 30,000 years BC Homo sapiens were the only type of human species left alive on Planet Earth. Neanderthal Man had become extinct 10,000 years previously. He had existed in Europe and the Near East but had never set foot on the African continent. It is believed that the population of Neanderthal Man never exceeded 10,000. Like Homo sapiens Neanderthal Man was adept at making hand tools, skilled in fire making and its use, wore home spun clothes and decorated themselves with ornaments. Their dead were given a ceremonial burial and in actuality their brain capacity was larger then that of Homo sapiens.

During the last Ice Age which occurred between 10,000 and 5,000 years ago the Sahara Desert, as mentioned previously had a Mediterranean type vegetation. Lakes and river systems existed. The inhabitants of this region possessed stone axes, were skilled potters as well as pastoralists. Bone harpoons and arrow heads which have been recovered suggest that they also hunted and fished. Similar finds have also been found in northern Ghana.
which suggests that during this period there was also a movement south caused by climate change leading to the transformation of the Sahara region into the desert region that it is today.

The foundations of the historical process that led to our present world civilization began with the movement away from old haphazard and less structured ways of life coupled with the invention of basket making and ceramics which enabled communities to store foods and liquids as well as to carry and transport them over larger distances. Probably with these changes came the construction of more permanent settlements and a sense of clearer boundaries of individual and group territorial space. Coupled with basket making and the discovery of ceramics came the realization that animals could be tamed, kept and bred leading to the ability to improve the quality of human existence instead of simply been hunted and slaughtered. Also there was the realization that specific seeds and roots could be improved, planted and cultivated instead of simply been collected in the wild. Mankind was no longer limited to small bands of people wandering in the wilderness, searching for food and water in order to sustain life. People began to live in larger groups and more permanent communal settlements as close as possible to fresh water supplies in order to feed himself, his livestock and water his crops. This Neolithic revolution was soon followed by the invention of writing which also revolutionized the way that we perceived ourselves and others.

It is important to realize that the development and use of tools first occurred in Africa. These first tools were used as shaping flakes, progressed to stone blades before becoming small sharpened stones which sometimes were attached to bone or wooden handles. Examples of these stone tools have been unearthed in southern Africa. Some of these tools in this region have been found to be 40,000 years old. In north and east Zambia the oldest similar type tools found are only 19,000 years old. The difference in antiquity may well be linked to climatic and geographical differences caused by an increase in annual rainfall leading to much thicker and denser vegetation. In North Africa similar events were unfolding around 35,000 years ago. During this period there were mines in the Nile Valley where the stone needed for the production of these tools was excavated. These stone mines constitute an extremely early example of organized industry. Concepts surrounding the industrial process could be said to have first emerged out of Africa during this Stone Age period. An even earlier hematite mine in Swaziland, located in the mountains near the Maputo River
dates back to 40,000 years BC. There is a possibility that it could have been in production 40,000 years earlier. Other mines have been found further inland. Some of these pre-historic mines were still in production until the late 19th century.

Classroom Activities

1. Map out the various prehistoric finds in Africa. Date the find, what it was and how old it was. What were the tools possibly used for. Link this to the country that is there now so that the pupil is aware of prehistory Africa and contemporary Africa.

2. Draw a time line for man’s evolution in Africa and movement out of Africa. Name the different types of Homo sapien.

3. Use drama to act out changes in awareness, in use of tools, in use of fire etc. Working in small groups with one or two individuals trying to communicate to the rest of the group the new tool that they had developed and how it could change their way of life. This could be used in other aspects of their life such as hunting/gathering.

4. In art see whether one can create the primary colours used in rock painting through vegetable dye. Get the class either in groups or as individuals to recreate images of ancient rock paintings.

5. Link this information into maps already created such as river and road systems.

6. Write an imagined tale of what life might have been like in this emerging world. Some of the ideas could be generated by the drama workshops and the art work.

7. Class discussion on whether Africa can be regarded as the cradle of civilization. Divide class into groups who support this idea and others who oppose it. Get each group to back up their ideas with facts.

8. Devise a board game based around learning which has taken place.

9. A mathematics activity. Find objects that weigh the same as the brain of hominids and compare these sizes of hominid brains with that of objects weighing the same as that of the modern homo sapien’s brain.
Agriculture in Africa

This chapter will attempt to map out the history of agriculture in Africa, partly building it around Charles Darwin’s firm belief that Africa was a continent out of which emanated very important technological inventions and innovations which is rooted in the earliest histories of mankind. During the 20th century certain scientists developed theories which centred upon the core belief that modern day agriculture has its roots in Africa and was invented in Africa.

Settled communities in Africa began to be developed in at least 20,000 years BC. Quite probably these communities first sprung up along the River Nile in the cataract regions of southern Egypt and northern Sudan or as it was once known Ancient Nubia. Archaeological historians believe that barley was been harvested as early as 16,000 years BC. The people living in these established and settled communities had the skills and capabilities to use wild grain as well as the ability to exploit water resources and were able to form stable and long lasting communities. The domestication of plants and the building up of livestock herds also led to the emergence of aesthetics, individual taste, discrimination as well a language. Modern day African language has its foundations in these small and settled communities established thousands of years previously. The beginning of modern day history can be partly marked through the introduction and development of agricultural systems.

It is believed that the origins of domestic cultivation and herding has its roots in the years between 11,000 years BC and 3,500 years BC. During this period the climate in Africa was much wetter and the height of this wet period occurred between 9000 years BC and 6000 years BC. The Sahara desert was transformed into a fertile grassland steppe with savanna woods around the entire region with rivers cascading down all the time from the mountains and where Lake Chad was an enormous inland sea. These environmental changes in the Sahara which happened at the end of the ice Age enabled the population to grab the opportunities that these changes bought. During this period innovative farming methods were introduced and developed in Africa as well the domestication of plants and animals.

The domestication of animals in north east Africa could have happened at a similar time as in south west Asia. Along the upper Nile and in Sudan hunting and fishing communities had been working in a loose partnership
since around 7000 years BC. They manufactured and used stone and bone tools as well as pottery. But the foundations of these communities could go back to much earlier time of 15,000 years BC. By that period the Nile Valley was a rich source of food. There was an abundance of wild game, grains, animals and fish and later on wild fowl. Along coastal regions shell fish was a valuable source of food. Permanent communities in sustainable locations were formed. Effective methods were devised for storing food. Smoking and drying techniques were developed and as a result of improvement to nutrition population growth occurred. Also a range of millet and dry rice was grown in West Africa at this time while sorghum was grown in Chad and Sudan. Yam and palm oil quite possibly could have been cultivated at a much earlier period. Communities could have been based around the movement of wild game and the seasonal harvesting of wild crops.

Western and Central Sudan has a history of successfully cultivating specialized crops. It is thought that the camel was introduced into Africa before the birth of Christ and some historians claim that the horse has its origins in Africa and that the donkey was first domesticated in north east Africa. Other people claim that cattle were first domesticated in the Sahara region because rock paintings have been found that show people with cattle. A grain of corn has been found in this region which dates back to 19,000 years ago give or take 300 years. This is thought to show proof of the early domestication of grass at a time when Asia Minor and West Asia were covered in ice. One also has to take in the role of birds when considering the origins and development of agriculture. They might have helped to promote plant growth across a region by dropping seeds over a wide area through their digestive system. Tuerag traders may also have taken new plants, seeds and trees along early trade routes and planted them en-route.

Research by Patrick Munson of Illinois University where he excavated ruins in the Tichitt Walata region of Mauritania and found an early agricultural community which dates back to between 1500 Years BC and 1100 Years BC. Most of the villages were built on the top of cliffs and were made of stone. The walls of the cliff plus a series of protective walls help to protect the villages. Some of these communities covered an area of 1 square kilometer. Munson believed that they could have been food producing as well as food gathering communities. Some of the communities were constructed alongside lakes and could have been home to fishermen, herdsman and horticulturalists.
The beginnings of livestock rearing, animal husbandry and grain cultivation could have occurred in the Sahara Desert when it was fertile savanna grassland and teeming with wild life. Animal husbandry and the domestic rearing of cattle occurred in the Sahara Desert region of Africa before it happened in the Nile Valley. Cave paintings have been found in this desert region depicting the herding of cattle. Since the start of this current millennium agriculture was seen as happening in the Sahara region as early as the 7th millennium BC. Pottery and ceramics are also linked to the development of agriculture. Pots were produced for specific purposes such as sowing, harvesting, growing plants in, for eating and drinking, all activities linked to agriculture. The greening of the Sahara Desert came to an end with ending of the last Ice Age. As the ice slowly melted in Europe and the Near East the region became more arid and was transformed into the desert region that we know today. Some pottery and rock paintings still remain from this period, which depict life as it was lived at the time.

The Senegalese scientist Cheikh Anta Diop firmly believed that Egyptian cultures had their origins in the western Sahara region. He also believed that some Senegalese agricultural knowledge was then spread throughout the entire Saharan region. He also noticed certain similarities between the rock painting found in the Sahara and that of Egyptian pictograph writing. Other research indicates that Egyptian agriculture has its roots in southern Sudan as well as in communities located around Lake Chad.

David W. Phillipson says,

“Shortly after 12,000 years there was a remarkably return to better watered conditions, increased run off from the highlands, coupled with higher rainfall and decreased evaporation resulted in a return of a regular flow of water to long dry wadis, the great enlargement of existing swamps and lakes, notably Lake Chad and the formation of new ones..... There were corresponding changes in vegetation and the distribution of wild animals.... The reason for these substantial changes are not yet fully understood. One of their most puzzling features is the rapidity with which they took place: the lakes appear to have reached their maximum height as early as 11,000 years ago.”

(Phillipson 1985)
N.I. Vavilov, the Russian plant paleontologist, who was one of the victims of Stalin's many purges, dying in a Russian labour camp during the 1940’s, through his intensive research came to the conclusion that there were possibly 5 places on the African continent where plant cultivation could have started. These 5 places were Ethiopia, the Niger bend, the Sahel region, Gambia, the Equatorial zones and the Zambesi River. He was also the first academic to reject ‘the diffuse theory’ which states that all African history has its origins in Egypt before spreading southwards into the Sahara and then into the rest of Africa. Writing in the 1920’s he says,

“The Sahara carries more agricultural history than Egypt.”

N.I. Vavilov was also of the opinion of the importance of Ethiopia as ‘a zone of agricultural origin.’ He reached this conclusion from his study of two plants; ensete and tef which are only found growing in the Ethiopian Highlands.

The Nilo-Saharan people of Central Sudan emulated the way their Afro-Asiatic neighbours collected grain. Wild sorghum was domesticated and cultivated. Pottery vessels able to store grain and to carry water were created at the same time. Some where between 7,000 years BC and 5,000 years BC, pearl millet, gourds, melons and a variety of beans were cultivated domestically. This agricultural expertise spread westwards across the southern regions of the Sahara.

By 3,000 years BC an agricultural base in West Africa had been established. I.H. Burkhill believes that the West African forest savanna region was the birth place of yams and that quite possible this could date back to some 5,000 years ago. Burkhill also believed that not one single place can be designated to where yams originated from and became domesticated. This process would have been spread over many generations before the yam that we know today would have been produced. The farming generations involved in this process would have been like 19th century pioneers travelling across the American prairies. They were literally breaking into new frontiers of knowledge which have helped to lay the seeds of today’s modern society. With the development of agriculture followed by trade, this newly acquired knowledge would have been slowly propagated along these newly formed trade routes which eventually stretched into Europe and right across Asia as far as China and Japan. The creation of forest clearings in West Africa for agricultural use is also linked to developments in the use of
iron and axes. Though many of these clearings could have been created with stone axes and in certain rituals connected to yams, the use of iron tools is forbidden.

There is a possibility that the domestication of yams occurred even earlier than Burkhill has stated. Some historians say that the domestication of yams happened 15,000 years ago in Polynesia and in Africa and that the relationship between mankind and yams marked an extremely important stage in the evolution and diversification of the ancestors of African people. Coursey writing in ‘Origins of African Plant Domestication’ places this time line at around 10,000 years ago.

By 5,000 years BC, Niger-Congo speakers in West Africa had expanded the number of plants that they cultivated and harvested. They grew crops of raffia, oil palm, palm, peas, groundnuts and kola nuts and by this period had also domesticated guinea fowl. African rice started to be grown in the Niger delta region, when the climate changed and started to warm up and become far dryer as a result of the ending of the last ice age around 3,000 years BC. Around this time woodlands, forests and rainforest regions of West Africa and in the Congo Basin were been cleared with the aid of polished stone axes designed specifically for agricultural purposes. At a time when periods of heavy rain fell in this region many fishing communities existed beside the many rivers and lakes which were formed at this time. The area from Lake Chad through to the Upper Nile and down south to Lake Turkana and the Great Rift Valley in East Africa was home to large groups of fishermen who made a living by bartering dried fish for grain and other products from the different communities based in their area.

Iron was used in West Africa for tools and for weapons. This advance enabled more land to be cleared for agricultural purposes and for hunting skills to be improved and to become far more effective. Boaz believed that Africa had either adopted or actually invented the art of iron smelting, at a historical period when Europe was still living in a Stone Age world. The use of metal was vital in accelerating agricultural development as well as paving the way for industrialization and W.E.B. Du Bois in ‘The Negro’ says,

‘Long before cotton weaving was a British industry, West Africa and the Sudan were supplying much of the world with cotton cloth.’
This ability to grow cotton and supply many countries with cotton demonstrates the agricultural skills that Africa already possessed prior to the Atlantic slave trade and European colonization. These skills had been developed across successive generations over many of thousands of years.

The history of bananas is another example which further illustrates the innate agricultural skills which existed on the African continent. The growing and cultivation of bananas is a very intensive process. The recent unearthing of banana phytoliths in Uganda may cause the beginning of agriculture in equatorial Africa to be put back to at least 5,000 years ago. Several banana phytoliths have been found in sediment carbon dated to over 5,000 years old. This puts into question the historical belief that bananas were first introduced to Africa along the east coast of Madagasca and that were in actual fact plantains and not bananas. Other people subscribe to the view that bananas reached Uganda from New Guinea in the mid to late 4th millennium BC. If this was proved to be true it would illustrate the possibility of trade and cultural links between the east as well as proving that the people of that time possessed the skills and ability to accurately navigate vast distances across oceans. Some historians link the arrival of bananas on the shores of Africa with Suaheli merchants. Bananas may have reached Africa via Malaysia and through the island of Madagasca. This could also be linked to the early ivory trade which was in existence 2,500 years ago. It was the ivory trade which first gave rise to the Suaheli culture.

Bananas were used as a source of cattle feed and this practice still continues in some parts of the world. In Jamaica the banana tree is an integral part of the landscape and its roots stem all the way back to the African continent. With the introduction and propagation of the banana tree, herdsmen were able to expand their herds of cattle because they had access to a regular supply of cattle feed.

Early farmers in Uganda realized that certain flowers after blossoming produced small fruit instead of buds. Through cross fertilization experiments which took place over a number of successive generations, these ancient farmers developed and produced the cooking plantain which today is a staple food within African and African-Caribbean culture. As previous stated this one plant has also shaped the landscape in Africa, in the Caribbean and Central America. Bananas were added to millet as a staple food for sea faring vessels and it is quite likely that bananas reached the Indian sub-continent from East Africa. The diet of these sailors was far
healthier than their European counterparts where scurvy caused by a lack of Vitamin C was common until the 19th century.

This introduction of bananas as a staple food on merchant vessels was another reason which allowed trade to expand. By the 5th century AD there was a flourishing international slave trade. Many of these slaves in this west to east trade originally came from Uganda. Writing in the 18th century, A.M.H. Sherif a historian at Baghdad University wrote,

‘Early 1200AD there was no noble place in China without black people.’

1. Other plants introduced to Africa via the Indian Ocean were coconut, sugar cane, rice, colocasoia and water yams. Chickens were also introduced to Africa from south-east Asia. Skeletal remains of chickens have been found in the Sahara in Djenne-Jeno and at the Machaga Cave in Zanzibar which date back to the first millennium BC. Crops which have their origins in Africa are also to be found in south-east Asia. For example crops like pearl millet, sorghum and cow peas. Pearl millet reached south-east Asia around 2,000 years BC but this date could be even earlier. Sorghum arrived in Korea around 1,400 years BC and cow peas which originated from either southern or West Africa were cultivated in Korea around 1,500 years BC. This is indicative that there were established links between south-east Asia and Africa during this time and that there was an active exchange of ideas and products. Two thousand years before the Roman invasion of Britain a flourishing agricultural base and sector was been formed in Africa with established sea and overland links between Africa and the Far East.

2. African rice (Oryza Glaberrima) was first thought to have been grown in West Africa 1,500 years ago, many years before the introduction of Indian rice (Oryza Satwa). It is possible that African rice was first grown in the flood basin of the Central Niger River and that pre-historic Africans transported it westward to Senegal and south to the Guinea coast and east to Lake Chad. The International Rice Research Institute (IRRI) has estimated that rice was domesticated in Africa around 6,000 years BC, though it is only recently that proof of an African strain of rice has come to light. African rice is hardier and more resistant to disease than Asian rice.

For over a century during the height of the trans-Atlantic slave trade, the USA state of South Carolina was a major rice producer. There is a distinct possibility that African rice was grown in this state during this time and that
some African slaves working the plantations may have been extremely knowledgeable about the niceties of rice cultivation.

3. Farming communities and settlements in the Niger Delta expanded. Many people in this region spoke Mande and they were skilled in the production of dried fish, rice and cotton. Food surpluses were traded in large open markets and the region around the West African town of Djenne the largest trading centre of the area. Rice production also took place in the tidal river estuaries of Guinea, Sierre Leone and Liberia. Salt water was used to eradicate weeds and unwanted vegetable from the farmland while fresh water was pumped in to irrigate the crops. These same agricultural practices were used on the slave plantations of South Carolina. Rice farmers in Sierre Leone growing wetland rice used the Decrue Method for growing their crops as well as a unique mixed cropping system. This method of intercropping has been practiced in Africa for over 6,000 years. This method uses a mix of fonio, millet and sorghum and is thought to have emerged along the Upper Niger or on the Senegal River. 80% of African farmers still use a mixed inter-cropping system and could these methods have been adopted by American plantations during the era of the trans-Atlantic slave trade? Africans also have a huge liking for rice and could this be caused by deeply rooted and very distant memories entrenched in the memories of their ancestors.

4. Pastoralism is an agriculturally based knowledge system which has evolved on the African continent over many thousands of years. Herding is an extremely complex way of life. A herdsman’s camp is organized around the basic needs of water, grass and firewood. Animals remain mobile and for the herdsman the household lies at the heart of the operation. The household is a place that the herdsman returns to and is the place where they plan and organize all of their activities. A pastoralist’s knowledge about their environment is immense. For example, the Borana people of East Africa have a vast awareness of the herbs, grasses, shrubs and trees that grow in their region and this knowledge is passed on orally from generation to generation. All pastoralists have to be aware about which stones contain salt as cattle need a certain amount of salt each day to survive. Cattle also need to eat specific plants and tree bark in order to remain healthy. The herdsmen must ensure that this is included in their daily diet. Tasks are separated according to gender. Women are responsible for milking. Boys are responsible for certain types of herding. Girls fetch and carry water and are responsible for cleaning and washing their home base. It is essential that
the camp is kept clean to prevent disease and ensure that the cattle stay healthy and strong. Men are responsible for all aspects of herding. It is men folk who decide which grass the cattle are allowed to graze on. Gadnin Dahl says that,

‘The people with the highest experience of risk management are the pastoralists. The pastoralists have a tradition of 8,000 years stored in their memories.’

5. The end of the last Ice Age in approximately 10,500 years BC as mentioned previously marked a dramatic shift in the climate and environment of Africa and personally I believe this change in weather helped to lay the foundation stones of modern day agriculture. The Sahara desert was transformed into a lush and fertile green valley. People moved back from the interior of Africa and from the coastal regions. By 5,000 years BC another dramatic change in climate had occurred. There was a dramatic decrease in rainfall and the green Saharan belt began to dry up and revert back to desert. Another mass population shift occurred with a move towards the Nile Valley where permanent and semi-permanent settlements were established. Also there was far less rainfall occurring in the central and eastern regions of Africa and dating from around 6,000 years BC there exists archaeological evidence of domesticated cattle. These domesticated herds co-existed alongside hunter-gatherer communities. In the Sahara and Nile areas there were a range of domesticated animals such as the pack ass and the screw homed goat. It is believed that the cultivation of crops started in the Sahel region around 5,000 years BC. Sorghum and rice were grown at this time and some settlements ad domesticated guinea fowl. The Oxford Atlas of World History says that this accelerated period of climate change occurred in 4,000 years BC. With the lakes and river systems drying up there was a massive expansion of desert regions coupled with a migration of farming communities, some of whom moved into West Africa.

Can the roots of agriculture be traced back to Africa? A number of theories were put forward in the 20th century which believed that this was the case, contradicting the common held belief that Mesopotamia was the cradle of agriculture. G.P. Murdock firmly believed that the Upper Niger was the birth place of agriculture. Critics of this theory say that if this was the case it would be the first time that any culture went from food gathering to food growing without developing a broader cultural base such as the production of ceramics and the construction of towns. Possibly, with the onset of climate
change after the last Ice Age the desert swallowed up these much older civilizations but so far no archaeological evidence has been produced to back up these claims which can categorically back up theorists such as G.P. Murdock who see Africa as the birthplace of agriculture.

Professor Fred Wendorf of the Southern Methodist University, as a result of his research findings, concluded that crops were first cultivated in Africa. He is of the firm belief that this first happened in the Western desert in Egypt at Wadi Kubbaniya where barley, capers, chick peas, dates, legumes, lentils and wheat were grown and harvested. Tools such as grinding and milling stones, cutting blades, hide scrapers and mortars and pestles were found at this site. It has to be remembered that 12,000 years ago the river levels of the Nile were much higher. At times when the Nile receded fish were left stranded in the shallow waters. Traces of ash and charcoal have been found at these sites where the trapped fish were killed and smoked. Crops were planted in the silt and once this had taken place the whole community reverted back to their hunter and gatherer existence. Between December and January crops were harvested and the collected cereals were milled and ground into flour. Gazelles, wild cattle, hartebeest, an occasional hippo, geese, duck and other wild game were hunted and were a source of nutritional food. The Nile would then flood again the following Summer.

Links exist between this ancient culture based in the centre of the Sahara Desert and later Egyptian civilizations. Professor N.I. Vavilov’s research concluded that the mountains of Ethiopia possessed the highest diversity of plant life in the world. He concluded that Ethiopia was a 5th world centre and believed that Egypt adopted crops from this region as its own agricultural system expanded. N.I. Vavilov describes Ethiopia as been, ‘Rich in indigenous plants as well as by its number of species in general.’

Northern African-Asiatic speakers during this period took methods of collecting and growing wild seed into Egypt where pigs and donkeys had become domesticated. This knowledge of seed cultivation was also taken from Africa into the Middle East where in normal circumstances tropical grasses could not be cultivated. Wheat and barley were grown instead and this knowledge fed itself back into North Africa via the Mediterranean. During this period Cushitic speakers, an off shoot of African-Asiatic people took knowledge and methods of animal husbandry, herding and of cultivating grain over all of the Horn of Africa and down through the central
plains of East Africa. This is also indicative of fluid and mobile communities who felt comfortable and able to travel across these vast and sometimes environmentally hostile areas. Valleys adjacent to the Ethiopian Highlands cultivated teff, (a local grain) and enset, a fruit indigenous to Ethiopia and similar to a banana.

The picture of Africa during this period is one where knowledge was shared between communities and was able to move freely around the continent. About 2,000 years BC marks the beginning of the Bantu migration. This massive movement of people continued until around 300 years BC and started from the Cameroon and eastern Nigeria. This migration started by canoe towards the forest regions of the Congo River basin. River communities were established. They cultivated yams and palms for oil as well as being active hunters and fishermen. The southern savanna grasslands of Angola were reached around 1,000 years BC. Around about this time the Great Lakes in East Africa were also settled on. They were skilled iron workers and learned the skills needed to maintain large herds of cattle and to plant and grow grain from the Sudanic and Cushite speaking people of that region. Bantu farmers became adept at growing yams and grain crops. They took the skills involved in working with iron, herding livestock and making pottery in small groups across much of east, central and southern Africa from around 300 years BC to 300 years AD. They also mixed with and absorbed much of the indigenous Khoisan speaking population but the Bantu migration did not reach the south-west area of Africa which has an extremely dry and arid climate.

A number of ancient agricultural systems were developed in Africa. The Firki/flood retreat system was based around the growing of dwarf sorghum (masakwa) and was planted on the flat ground in early October and grown on the moisture kept along the edges of fields. This method was used by the Shuwa and Kanun who lived west and south of Lake Chad. Another agricultural system which emerged out of Africa was the montane which was a form of terraced cultivation. This system was developed by Chadic speakers. One of the purposes behind the Montane system was to prevent soil erosion. They also developed complex systems of crop rotation helping to maintain the sustainability of soil and help prevent it from becoming exhausted of minerals. This system could be found in the Mandora mountains. Agro-Pastoral system was an opportunistic method of cereal cropping was developed alongside the herding of cattle. This method could be found in Central Borno amongst the Koyam, Shuwa and Fulke people.
Yet another example is rain fed agricultural systems on grasslands in savanna belts used by the people of southern Borno.

The Decrue irrigation method is believed used in the growing of crops in Africa is said to be between 4,000 years and 5,000 years old and is thought to have originated from the region of the Niger River Bend near Timbuktu in Mali. Planting begins when the river water starts to recede and to disappear during the annual dry season. The local people use the moisture retained in the soil to propagate new crops. This agricultural system is described in detail in *Decrue Agriculture in Mali* written by Jean Pasquereau and Jack R. Harlan. In the book they state that,

‘A decrue crop must mature on moisture stored in the soil. Any device that will speed up the life cycle of decrue crops can be useful. One of the most common is transplanting and sorghum is the crop most handled in this way. Seedlings are established in a bed of sandy soil. As the water recedes and land becomes available the seedlings are uprooted and placed individually in deep dibble holes provided by ramming a stake into the soil. The transplant dibble is 1.5 – 2 metres in length and the holes are often 30cm – 40cm deep. Seen from this angle decrue can be described as a transplantation method with a systematic use of water and moisture, not a sensational act but a rather modest adoption based upon observation – supporting the credo popular in several decades of the 20th century which is ‘small is beautiful.’

G.P. Murdoch went against the grain of conventional thinking that saw the continent of Africa as having no past or history except for Ancient Egypt. He put forward the theory that agriculture was invented and that food plants were domesticated in the Mandingo country of the Upper Niger basin. Writing in *Africa: Its People and Their Culture* (1959) he expands on the concept that there was the cultivation and domestication of up to 24 nutritional and fibre plants south of the Sahara. He also raises the question as to whether the Decrue Irrigation System originated in this region and not on the Niger Bend. Also he was convinced that the domestication of cattle first happened in North Africa. Murdoch based his theories through the research he carried out exploring diet plant origins in Africa. Other researchers say that agriculture has its origins at Dhar Tichitt in Mauretania where the Decrue Water System was also practiced.
Arab writers over the centuries describe an Africa plentiful in agricultural produce. Africa plagued by famine and poverty came at a much later date and these could have been partly caused by the massive economic dislocation caused by the slave trade and colonization of the 19th and 20th century. Al-Bakri an Arab writer describes gardens at Awdaghurst, a town on the trans-Saharan trade route as having gardens planted with date palm, irrigated wheat, fig trees, vines, henna and gourds. In the town of Takrur, sorghum and cotton were cultivated. Another Arabic writer called Al Umari writing in 1337 describes Mali’s main crops which were rice, wheat, sorghum, yams, kidney beans, gourds, onion, garlic, aubergines, cabbage and shea butter. It is only since the 1950’s that many of these crops can now be found on the shelves of British supermarkets and form part of our staple diet. Another renowned Arab travel writer called Ibn Battuta, writing in the same year and journeying through Sudan, describes in detail about the date palms, water melons, shea butter, calabash, pennisetum, pulped lotus flour, rice, fonio, kidney bean, flour and yam cultivated in the Sudanese region. Crops produced in Britain in this period did not match the variety found in Africa and anyone hunting game without permission could be executed or dealt with extremely harshly by the local Lord. During the middle ages in Africa the diet was varied and balanced.

One of the first visual images of agricultural practice found anywhere in the world must be the large rock paintings that have been found in the Sahara Desert, painted between the 4th and the 3rd millennium BC. These rock murals show illustrations and images of cattle herding though some critics say that the cattle depicted are not domesticated. Saharan rock art also shows the world’s first pictorial record of someone milking an animal. A 9th century account from China exists which describes East Africans mixing ox blood with milk and then drinking it, a very nutritious practice which still occurs today in parts of Africa. This account also adds weight to the wide international links that existed between Africa and other parts of the world. Herodutus the Greek historian, writing in the 1st millennium BC describes the cultivation of dates which were grown and deliberately cultivated along the expanding trade routes of the time in order to provide en-route a nutritional source of food.

The African people are skilled agriculturalists and quite possibly one of the results of the European incursions into the continent could have been the transmission of their agricultural knowledge and practices to Europe. This export of knowledge could have helped to fuel the 18th century Agricultural
revolution in England. One example of the African peoples great understanding of farming methods and principles is the Serer people living in the Sahel region of Africa who for over a thousand years have planted crops of A alibida like the plant acacia, because they were aware of the positive effects that this plant had upon soil fertility. They have developed a complex agro-pastoral culture where crops and animals working in partnership help to create a sustainable agricultural system. They maintain 50 mature trees for every hectare which provide shelter at night for cattle who at the same time fertiles the trees and the surrounding area. Also the cattle eat the fruit of the trees which provide a medicinal source as well. There is a local African saying which says,

‘In the beginning there is a tree’

And a pre-Islamic proverb which says,

‘If you cut down a tree you remove 3 bags of mil from your granary.’

The Serer’s also believed that trees had been in existence since the dawn of mankind and that they are there primary to provide a service to mankind. With the destruction of vast areas of rain forest today and the rise of incidences of global warming the Serer’s philosophy is even more relevant in to the world today.

20,000 years ago the African cereal mil was in a state of transition from been a wild plant to been a domesticated one and in this period was cultivated in ceramic pots. Since the beginning of Serer memory these people have been aware of 8 different types of millet and today, mil and sorgho which are large and small grains are planted together simultaneously. It has to be stressed that this agricultural knowledge was acquired over many generations and involved much trial and error. In the Tichitt Walata region of Mauritania it took them around 500 years of experimentation to select Pennisetum as their staple crop rather then the grain Kram, plants local to the region. Kram is a spiky plant that is pounded to get rid of its spikes and the seeds are grounded up whilst Pennisetum is a type of grass used either as pasture, hay or silage. The website titled Common Edible Plants of Africa gives excellent descriptions of these plants. Archaeologists obtained this knowledge from marks of grain found on ceramic pots unearthed in the region. At one stage 80% of the marks found on pots were made by Kram
but half a millennium later most of the grain marks on ceramic pots were made by Pennisetum.

An array of agricultural systems were spread across the whole of the African continent. The vast population could not have sustained itself simply through hunter/gatherer communities. Also the African people could not have survived the brutality of the trans-Atlantic crossing if they had been a weak and undernourished people. These agricultural communities were also deeply rooted in Africa. For example the Kintampo Caves in northern Ghana played host to a community of cave dwellers dating back 3,500 years.

Also evidence has been uncovered that yams, millet, pumpkin and palm trees were also grown in the region of the Kintampo Caves. Joanna Casey who has studied the various cultures of this region described them as,

‘Settled horticulturalists.’

Monks in Ethiopia cultivated domestic plants similar to European monasteries and each Ethiopian monastery is said to have had a well cultivated and managed garden. Monks in Ethiopia altered the genetic nature of ensete, a banana type plant, so that it did not produce fruit. Holy men and shaman living in isolation in the mountains of Ethiopia developed and accumulated a vast amount of plant knowledge. Much of eastern and southern Africa was occupied by Bantu speaking iron age cultivators. They settled in areas close to good water sources on the edge of forests, in fertile valleys and along coastal and lake shores. These Bantu communities were dependant for their survival upon yams, sorghum, fishing, hunting and upon the keeping of livestock. In east Africa many permanent communities were formed along the shores of Lake Victoria. A lot of forest areas were cleared in this region and on the foothills of high mountains like Mount Kenya and in areas close to the Rift valley and western Tanzania. In southern Africa by 500 years AD, small groups of people had settled in valleys and on land going up into the high veld. The upland areas were also quite probably used for grazing their cattle herds on. Circular huts were constructed with central cattle pens together with storage pits and graves. These became very distinctive to southern Africa as were the straight streets and rectangular huts of the western equatorial African hamlets. In rural Jamaica the African tradition of burying one’s family close to one’s home is still carried out. The grandmother of the owner of a guest house that I stayed in was buried by the washing line close to the steps leading to my apartment. People living in
forest areas cultivated yams, coco-yams, bananas and legumes. They also grew kola trees and exploited the palm products growing in the vicinity. Rice was grown as a staple crop from Gambia to Liberia. In the Savanna grasslands a wide variety of types of grain were grown. In northern Ghana millet was propagated with the aid of light weight hoes which only touched the soil’s surface lightly while the Hausa people of Nigeria used heavy hoes to grow their crop. These hoes dug deep and their millet crop was grown on ridges and they also used irrigation techniques to grow cotton and other specialized crops. Lastly the food grown in Ancient Egypt are vegetables which can now be purchased on a daily basis in the high street supermarkets in Britain today. Their gardens were filled with leeks, onions, cucumbers, peas, beans, radishes, melons, dates, grapes and figs, barley and emmer wheat. The Africa of 3,000 years BC shapes our diet and cuisine in the 21st century. Take away this agricultural expertise and knowledge and the world that we know today would be a totally different world.

Classroom Activities

1. Map out the different types of food grown on the African continent. Research the plants and their uses. Possibly log on to the website titled Common Edible Plants of Africa. On this map mark in the river and lake systems, the type of environment i.e. savanna grassland/forest/mountains
2. Map out the Bantu migration paths – draw up a time line of this mass migration.
3. Create an experiment in the classroom using the Decrue Method. Plant seeds on a soil heavy in moisture and soils with less moisture. Look at the different results. Compare and contrast the differences and analyze the reasons for the differences. See whether this system could be improved upon.
4. Discuss environmental issues raised in an African’s approach to the land and whether this approach could be relevant in today’s debate about climate and environmental change.
5. Write an essay from the perspective of an African living in a prosperous pre-history farming community who finds themselves on a modern farm in Britain.
6. Working in small groups get the class top devise a board game based around African agricultural knowledge and production. It could be like a monopoly type game where certain plants and knowledge are of more value then others. Use the internet to find out this information
as well as resources in the school’s learning centre and library. Make sure that a clear list of the plants that are grown is compiled by the students.

7. Compare and contrast maps produced from other activities. Are these maps helping them to gain a greater understanding of Africa?

8. ‘Small is beautiful’. Discuss this statement in relation to African agriculture. Do you think that this statement has any relevance in the 21st century?