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Date: _____

Early Humans – A Short Introduction

Directions: Read and analyze the information presented in the article on early Humans. Make sure to include a quote from the article to support your answers.

WHAT DO WE MEAN BY “EARLY HUMANS”?

Let us begin by identifying what we are not focusing on here. We are not focusing on the question of where human beings came from originally: whether we evolved, or were created by a higher power. As you know, this question is highly controversial. Many people, including most scientists around the world, believe that human beings experienced evolution, or gradual change as a species over time. According to this view, environmental factors caused gradual change in the genes of ancient apelike species, developing into modern humans over millions of years. Other people, including about 4 in 10 Americans (and 6 out of every 10 weekly churchgoers), believe in creationism, the idea that God created human beings in their present form fairly recently – within the last 10,000 years or so. The debate between evolution and creationism is interesting, and we must acknowledge that it is often personal for many students and their families. That said, it is not the focus of this reading.

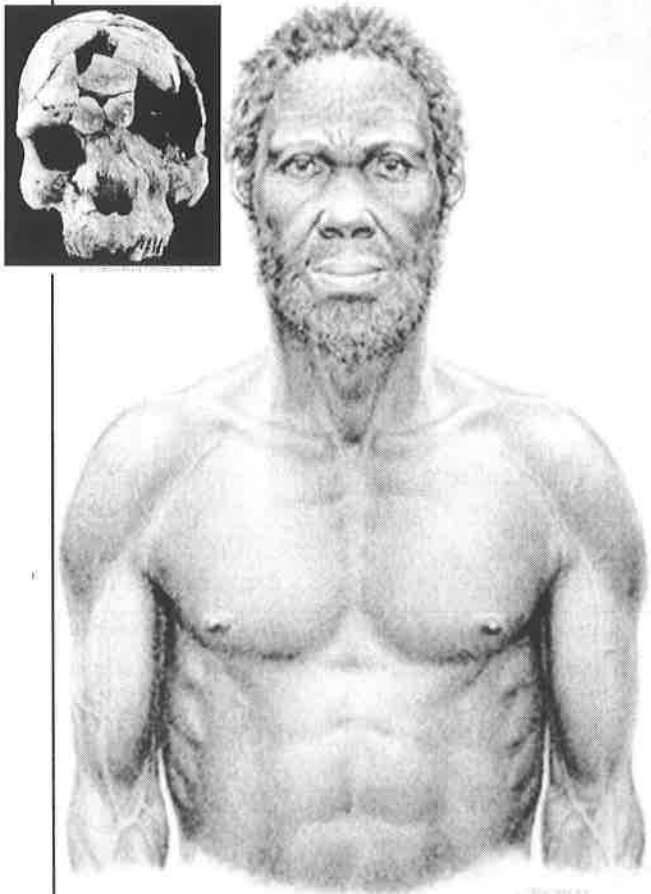
Instead, we investigate early humans. We define these early humans (or *Homo sapiens*, to use the scientific name), as the first to be recognizable as people. These people were not Neanderthals, and they did not have the overhanging foreheads or knuckle-dragging posture of the “cavemen” one might see in a museum exhibit (or a Geico commercial). Rather, if dressed in 21st century style, early humans would look just like anyone else on a busy city subway. Far from speaking in grunts and simple sign language, they used language just as complex and sophisticated as our own languages (although they had not yet invented writing). They had families and loved ones, they had hopes dreams and fears, and they liked art and games and stories, just like

anyone alive in the world today. We define early humans as, in short, the first recorded examples of us. So where did these people live, and how long ago did they appear?

EARLY HUMANS LIVED IN EASTERN AFRICA

The picture at the right represents some of our clearest ideas about early humans. It was produced by artist Jay Matternes, from the skull of the oldest known bones of a human being anywhere in the world. The skull (also pictured), was discovered in shattered fragments in Ethiopia in 1997, and put back together. Matternes imagined adding muscles, skin, and hair to produce this drawing, much as police artists do on television crime dramas like *CSI* or *Bones*. Today, the skull is on display in a museum in Ethiopia, but the pictures are available all around the world, to anyone who has internet access.

The bones used to create this picture were discovered and reassembled by researchers who study human beings and our ancient history, in a field known as anthropology. These anthropologists –Ethiopian Dr. Berhane Asfaw and American



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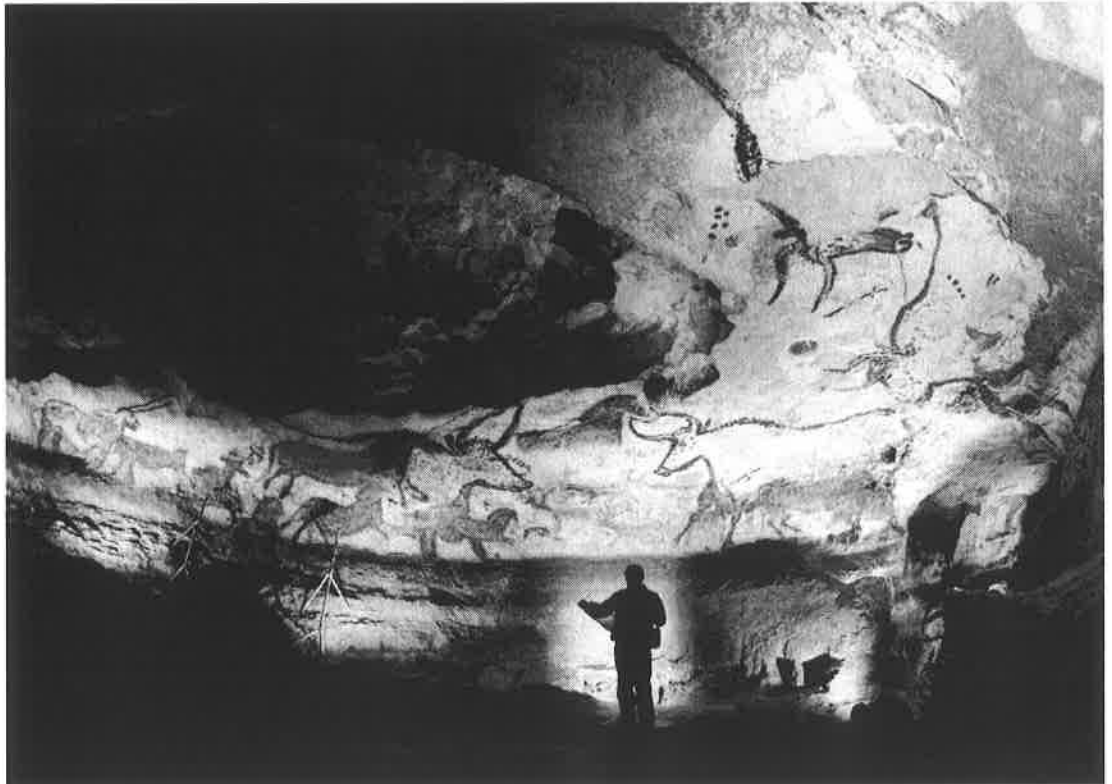
Dr. Tim White and – believe the bones date from about 160,000 years ago. Asfaw and White’s discovery supports the

most common theory among anthropologists: that we first originated in Eastern Africa between 150,000 and 200,000 years ago. Although there is much disagreement about precisely where and precisely when, the evidence strongly suggests that all modern humans in the world today are descended from people who lived in Africa long, long ago.

HOW DID EARLY HUMANS LIVE?

Most, if not all, early humans were nomadic. This means that, rather than having one settled home like most people today, they moved around a large territory throughout the year. Farming hadn’t been invented yet, so people lived off what food they could find or hunt, and food and water supplies varied and changed with the seasons, with the yearly rising and falling of rivers, and the migration of animals. Nomads had to move around to survive.

Until about 40,000 years ago, early humans had a very simple culture. It was only around this time that humans appear to have begun developing behaviors that we would recognize as typical of modern humans today. These behaviors include creating artwork (such as the cave paintings in Lascaux, France, at right) and musical instruments, building permanent fire-pits, wearing animal skins as clothing and dying fabrics (and creating needles and so on, with which to sew the clothing), wearing jewelry, mourning the dead through funerals, and building shelters (rather than just living in caves).



Tens of thousands of years ago, the quality of people’s lives around the world may have varied quite a bit, although perhaps not as much as it does today. Whether a person lived an easy or a difficult life would have depended a lot on the climate and the weather during his or her lifetime.

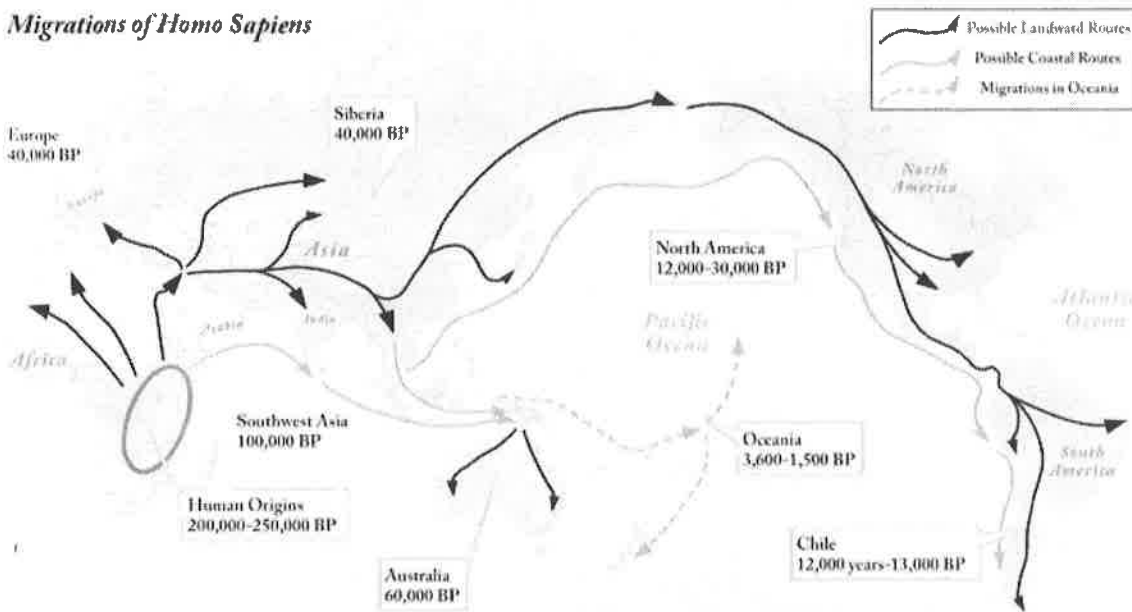
HOW AND WHEN DID HUMANS SPREAD AROUND THE GLOBE?

Fossil and DNA evidence has shown that Homo sapiens evolved in Africa, and then spread outward around the globe. To figure out exactly how, where, and when, scientists and historians use DNA evidence, fossils, and archaeology (the study of human artifacts and culture) to piece together a clear story about what happened. As the gaps in this story continue to be filled, it will no doubt change. But for now, here’s what scientists believe.

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Migrations of *Homo Sapiens*



From their beginnings in Africa, early humans went first to Asia between 100,000 and 60,000 years ago. By 60,000-45,000 years ago, we had settled in the islands of the South Pacific: Indonesia, Papua New Guinea, and Australia. We entered Europe about 40,000 years ago, along the north and south coasts of the Mediterranean Sea. And about 15,000

years ago, many scientists believe, humans crossed from Asia to North America and from there to South America. Others disagree with this hypothesis.

HOW DID HUMANS GET TO LOOK SO DIFFERENT FROM EACH OTHER?

Because of early humans' complex culture and technology, we were able to spread throughout the world and live in a range of different physical environments – from the tropical islands of the South Pacific, to the snowy treeless mountains of the Himalayas, to the temperate forests of the Pacific Northwest. This spreading across the globe may have contributed to the great diversity in humans' physical appearance that we see in the world today. This is because, in each environment, people with certain characteristics survived more easily and had more children, thus passing their useful characteristics on to future generations. For example, in a very cold environment, short, stocky people might survive more easily, because they conserved body heat more efficiently. These short, stocky people would give birth to short, stocky children, and over many generations, the entire society would develop a more compact body size. Similarly, some scientists believe that in a very hot and sunny environment, it may have been an advantage to have darker skin, to protect from overexposure to the sun. Thus dark skin may have become increasingly common in sunny places.

Other times, cultural selection may have impacted what a particular group of people looked like. If a cultural group decided it was beautiful to have red hair and freckles, then the red-haired, freckled people would have more success finding partners and having children. Over time, the entire society would include more and more red-haired, freckled people. So basically, humans' ability to use technology and to move around led to our spreading around the globe, and this led to this great diversity in our physical appearance – because of environmental factors, because of culture, or both. And yet, at the genetic level, humans seem to have changed very little over hundreds of generations. We are all more alike one another in our DNA, than, say, any two fruit flies or any two bacteria.

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