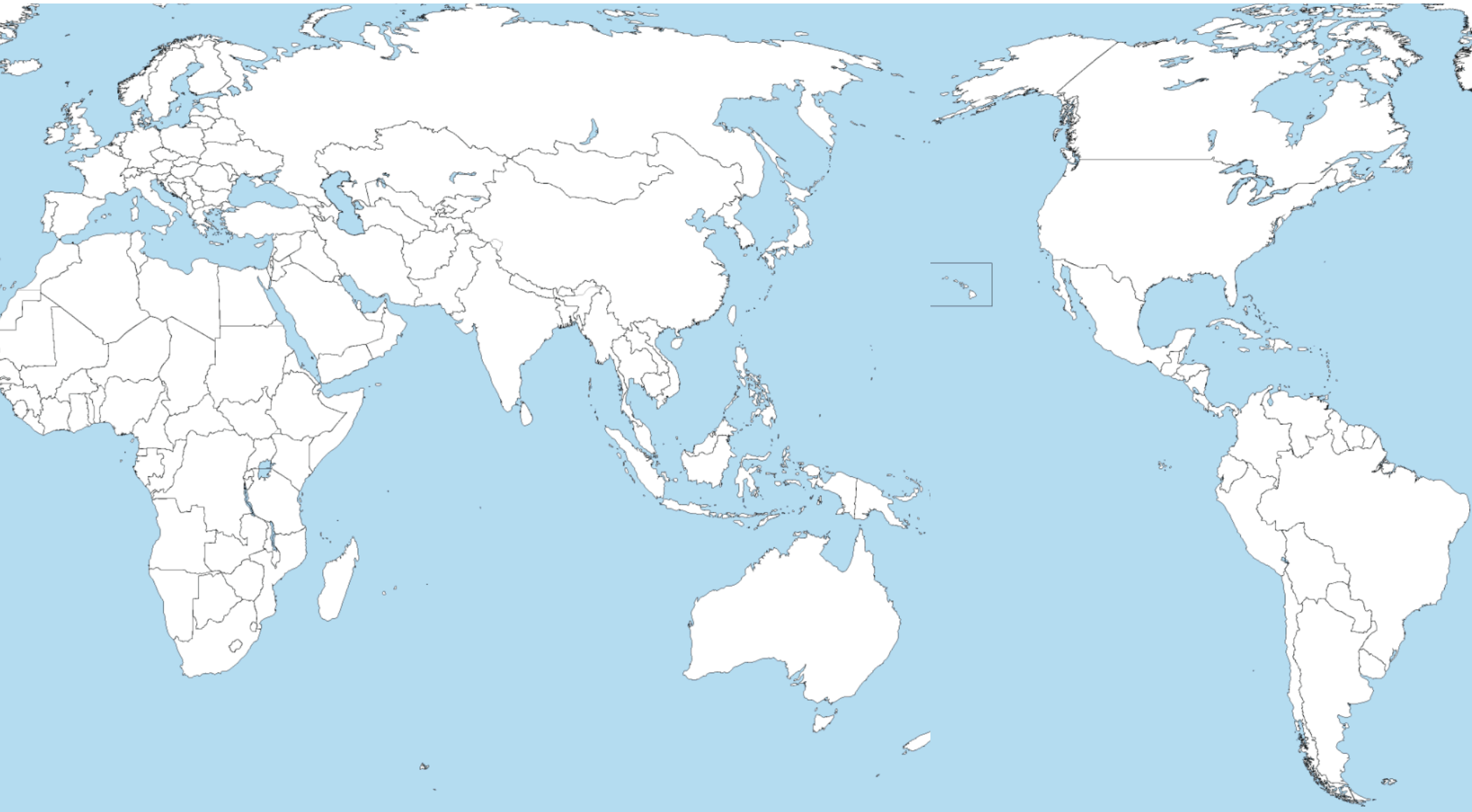


Name: _____

World History: Unit 1

Out of Africa: Analyzing the Record

Step 1: Use the evidence compiled in the [presentation](#) to create an annotated map of human migration out of Africa. Your map does not have to be perfect, and it may look different from someone else's. That is ok. When you mark a spot where humans migrated, include a brief description or date when possible (ex: human skull, 90,000 years ago). Then read the article on the back.



Making inferences: Based on the information you used to map human migration, how did humans migrate out of Africa and populate the rest of the world? Make an inference (educated guess) in the space below.

Human Migration Patterns, *Smithsonian Magazine*

The first archaeological evidence of a human migration out of Africa was found in the caves of Qafzeh and Skhul, in present-day Israel. These sites, initially discovered in the 1930s, contained the remains of at least 11 modern humans. Most appeared to have been ritually buried. Artifacts at the site, however, were simple: hand axes and other Neanderthal-style tools. The bones in this region date to 93,000 to 180,000 years ago, some of the oldest human remains found outside of Africa, along with another find in Greece. But these excursions appear to be dead ends: there is no evidence that these moderns survived for long, much less went on to colonize any other parts of the globe. They are therefore not considered to be a part of the migration that followed 10,000 or 20,000 years later.

Intriguingly, 70,000-year-old Neanderthal remains have been found in the same region. The modern humans, it would appear, arrived first, only to move on, die off because of disease or natural catastrophe or—possibly—get wiped out. If they shared territory with Neanderthals, the more "robust" species may have outcompeted them here. It was also at this point in history, scientists concluded, that the Africans ceded Asia to the Neanderthals.

Then, about 80,000 years ago, modern humans entered a "dynamic period" of innovation. The evidence comes from such South African cave sites as Blombos, Klasies River, Diepkloof and Sibudu [all in South Africa). In addition to clay carvings, the Blombos Cave yielded perforated ornamental shell beads—among the world's first known jewelry. Hafted points at Sibudu and elsewhere hint that the moderns of southern Africa used throwing spears and arrows. Fine-grained stone needed for careful workmanship had been transported from up to 18 miles away, which suggests they had some sort of trade. Klasies River, traces of burned vegetation suggest that the ancient hunter-gatherers may have figured out that by clearing land, they could encourage quicker growth of edible roots and tubers. The sophisticated bone tools and stoneworking technologies at these sites were all from roughly the same time period—between 75,000 and 55,000 years ago.

Did new technology, improved nutrition, or some genetic mutation allow modern humans to explore the world? Possibly, but other scholars point to more mundane factors that may have contributed to the exodus from Africa. A recent DNA study suggests that massive droughts before the great migration split Africa's modern human population into small, isolated groups and may have even threatened their extinction. Only after the weather improved were the survivors able to reunite, multiply and, in the end, emigrate. Scholars think that humans from South Africa migrated to East Africa, where they mingled with the existing human population and transferred technological skills. Shortly after, this new population migrated out of Africa. Improvements in technology may have helped some of them set out for new territory, or cold snaps may have lowered sea level and opened new land bridges.

The traditional story goes like this: *H. sapiens* from East Africa first made their way out of Africa no earlier than 120,000 years ago, likely migrating north along the Mediterranean coast and south onto the Arabian Peninsula. These people settled in the Levant and Arabia and their descendants—or

those from a subsequent early human migration out of Africa—traveled into Europe tens of thousands of years later. Some researchers suggest that the group that made their way into Arabia traveled out of Africa by boat from the Red Sea along the coast of the Arabian Peninsula.

But new findings around the Mediterranean and Middle East indicate that earlier populations might have migrated out of Africa well before what scientists originally thought and perhaps from several different points of origin. A new crop of discoveries, particularly from Asia, suggest that modern humans first left Africa some 200,000 years ago, taking multiple different routes. If humans traveled out of Africa and into Asia earlier than previously thought, it's possible these early human migrations were ultimately unsuccessful and died out or migrated back into Africa. According to conclusions from three different groups of scientists, the DNA of Eurasians diverged from that of Africans 60,000 to 80,000 years ago. In other words, all humans alive today are descendants of *H. sapiens* who migrated out of Africa *within* that window around 80,000 years ago rather than descendants of earlier humans, so earlier populations that migrated out of Africa perhaps either died out, were replaced by/bred with later populations, or migrated back into Africa and mingled with those populations that later migrated out of Africa. To the south, the fossil and archaeological record is clearer and shows that modern humans reached Australia and Papua New Guinea—then part of the same landmass—at least 45,000 years ago, and maybe much earlier.

Analysis Questions (use space on back if needed)

1. Researchers used to think that our ancestors migrated out of East Africa and into the Middle East around 80,000 years ago. Why has this theory been challenged?
2. Does the information you used to make your map support the multiple waves of migration theory? Explain.
3. If there were multiple waves out of Africa, what happened to those earlier human migrations? Why is it that this later wave of migration 80,000 years ago might have been more successful than the earlier groups that migrated out of Africa?