ESSENTIAL QUESTIONS:
- What is the relationship between decisions and consequences?
- How can a person’s decisions and actions affect their future?
- What are the physical and political regions of Africa?
- What natural resources are found in Africa?

PROCEDURES:
- **Assignment #1** Read about the butterfly effect. Think about what is happening now and how this might apply.
- Answer the Journal entry questions on your own paper.
- **Assignment #2** Read Source A on Africa.
- Answer Questions for Source A on your own paper.

WORK TO BE RETURNED:
- Journal Response for Week #1
- Questions for Source A

RESOURCES:
- Reading on the Butterfly Effect; Source A on Africa

TIME ALLOCATED:
- 2 (30) minutes Assignments

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**Assignment #1**

**What is the Butterfly Effect?**

The Butterfly Effect can be defined as something that creates a bigger impact on the lives of people. Small thoughts can also lead to big changes. A single pebble thrown in the water can disrupt still water, and create chronicles of ripples. Every creature impacts each other. If a creature dies, his off-springs will not take birth, which will again impact the ecosystem. Every single action of ours and every happening in this universe has an impact on something else. This term was popularized so much that it has been introduced in the literature. Many books and movies have incorporated it. Did you know that each of these shows and/or movies (“Back to the Future”; “Heroes”) has been influenced by stories we read? Can you guess how?

The phrase refers to the idea that a butterfly’s wings might create tiny changes in the atmosphere that may ultimately alter the path of a tornado or delay, accelerate, or even prevent the occurrence of a tornado in another location. The flapping wing represents a small change in the initial condition of the system, which causes a chain of events leading to large-scale alterations of events. Had the butterfly not flapped its wings, the trajectory of the system might have been vastly different.

To understand the concept first let’s start with something we already know like the domino effect.

1) As the world runs out of oil, gas prices will rise.
2) When this happens prices for specialized items of import and export (like coffee) will eventually rise.
3) Food prices will then rise.
4) The price of products that require oil to make them will also rise. (8 ½ gallons of oil in each car tire!)

The “Butterfly Effect” is similar, except that we cannot see what causes what. We know that small things can affect entire systems.
**Directions:** Create a journal entry that answers two of the following questions. Please do this in the text box below. (only Pick two)

- How has your daily life changed over the past three weeks?
- Would you go back in time if it were possible? Where would you go and why?
- How might your actions during your lifetime affect someone living one hundred years in the future?
- Do you believe that you have a responsibility to future generations?

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**Assignment #2  Source A**

**The Major Regions of Africa**

Africa occupies 20% of the world’s landmass and can be divided into five geographic regions. These regions are simply known as North Africa, East Africa, West Africa, Central Africa, and Southern Africa. Remember that Southern Africa is a region made up of several countries, one of which is South Africa.

North Africa is made up of the countries that border on the Mediterranean Sea and are north of the great Sahara Desert. Egypt is the most populated country in North Africa due to the fertile Nile River that runs through it. The Nile River is the longest river in the world. Most of the countries, except for Sudan, are relatively prosperous because of long-time trading with countries around the Mediterranean. The climate of North Africa is warm enough to be considered tropical to subtropical.

West Africa is defined as the area of the western bulge of the African continent south of The Sahara Desert eastward to the highlands of Cameroon. West Africa occupies 25% of the African continent but has about one-third of Africa’s population. The West African climate is typically hot and tropical but the areas near the Sahara Desert lack rain and experience great changes in temperature.

East Africa contains the beautiful scenery we associate with Africa. East Africa is the location of Mount Kilimanjaro, the highest mountain in Africa, and the Serengeti Plain, home to the most beloved species of African wildlife. Most of the people in East Africa make their living by farming and are greatly affected when there is a drought. Even though these countries sit on the equator, highland plateaus keep the temperatures moderate.

Central Africa is the mid-content area below Africa’s western bulge. This central area also sits on the equator and remains hot because it is below the highlands of East Africa. Much of the area is rainforest, getting 80 or more inches of rain per year. Central Africa is home to the famous mountain gorillas. Most of the people of Central Africa live on or near the coast of the Atlantic Ocean.

Southern Africa is the narrow southern tip of the continent and includes the island of Madagascar. Because Southern Africa is the furthest part of Africa from the equator, it experiences the greatest fluctuation in temperature of all of Africa. Southern Africa does not get enough rain to grow thick forests. Southern Africa has trees in open woodlands and grassy regions known as Highveld. The far south region is heathland filled with shrubs and flowering plants. There are about 340 different mammals in Southern Africa.
Natural Resources of Africa

Salt from the Sahara desert was one of the major trade goods of ancient West Africa where very little naturally occurring deposits of the mineral could be found. Transported via camel caravans and by boat along such rivers as the Niger and Senegal, salt found its way to trading centres like Koumbi Saleh, Niani, and Timbuktu, where it was either passed further south or exchanged for other goods such as ivory, hides, copper, iron, and cereals. The most common exchange was salt for gold dust that came from the mines of southern West Africa. Indeed, salt was such a precious commodity that it was quite literally worth its weight in gold in some parts of West Africa. In addition, salt was always in great demand in order to better preserve dried meat and to give added taste to food. The savannah region south of the western Sahara desert (known as the Sudan region) and the forests of southern West Africa were poor in salt. Those areas near the Atlantic coast could obtain the mineral from evaporation pans or boiling sea water, but sea salt did not travel or keep well. A third alternative was salt derived from the ashes of burnt plants like millet and palms, but again these were not so rich in sodium.
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**TO DO** Use Source A to answer the following questions in complete sentences, in the text boxes provided.

1. Explain why North Africa is, in general, more prosperous than the rest of the continent.

2. What is the influence of the Nile River on Egypt?

3. The countries of East Africa are very close to the equator but do not have a tropical rainforest climate. Why?

4. Describe the climate of Central Africa.

5. Explain why salt was one of the major trading resources in West Africa. How was it transferred across Africa?

6. What was salt usually traded for?

7. What was the main reason salt was an important resource in Africa?