**Period 1:**

**Technological and Environmental**

**Transformations, to c. 600 B.C.E.**

**Key Concept 1.1.** Big Geography and the Peopling of

the Earth

The term *Big Geography* draws attention to the global nature of world history. Throughout the Paleolithic period, humans migrated from Africa to Eurasia, Australia, and the Americas. Early humans were mobile and creative in adapting to different geographical settings from savanna to desert to Ice Age tundra. By making an analogy with modern hunter-forager societies, anthropologists infer that these bands were relatively egalitarian. Humans also developed varied and sophisticated technologies.

1. **Archeological evidence indicates that during the Paleolithic era, hunting-foraging bands of humans gradually migrated from their origin in East Africa to Eurasia, Australia, and the Americas, adapting their technology and cultures to new climate regions.**
   1. Humans used fire in new ways: to aid hunting and foraging, to protect against predators, and to adapt to cold environments.
   2. Humans developed a wider range of tools specially adapted to different environments from tropics to tundra.
   3. Economic structures focused on small kinship groups of hunting-foraging bands that could make what they needed to survive. However, not all groups were self-sufficient; they exchanged people, ideas, and goods.

**Key Concept 1.2.** The Neolithic Revolution and Early Agricultural Societies

In response to warming climates at the end of the last Ice Age, from about 10,000 years ago, some groups adapted to the environment in new ways, while others remained hunter-foragers. Settled agriculture appeared in several different parts of the world. The switch to agriculture created a more reliable, but not necessarily more diversified, food supply. Agriculturalists also had a massive impact on the environment through intensive cultivation of selected plants to the exclusion of others, through the construction of irrigation systems, and through the use of domesticated animals for food and for labor. Populations increased; family groups gave way to village life and, later, to urban life with all its complexity. Patriarchy and forced labor systems developed, giving elite men concentrated power over most of the other people in their societies. Pastoralism emerged in parts of Africa and Eurasia. Pastoral peoples domesticated animals and led their herds around grazing ranges. Like agriculturalists, pastoralists tended to be more socially stratified than hunter-foragers. Because pastoralists were mobile, they rarely accumulated large amounts of material possessions, which would have been a hindrance when they changed grazing areas. The pastoralists’ mobility allowed them to become an important conduit for technological change as they interacted with settled populations.

1. **Beginning about 10,000 years ago, the Neolithic Revolution led to the development of new and more complex economic and social systems.**
   1. Possibly as a response to climatic change, permanent agricultural villages emerged first in the lands of the eastern Mediterranean. Agriculture emerged at different times in Mesopotamia, the Nile River Valley and Sub-Saharan Africa, the Indus River Valley, the Yellow River or Huang He Valley, Papua New Guinea, Mesoamerica, and the Andes. B. Pastoralism developed at various sites in the grasslands of Afro- Eurasia.
   2. Different crops or animals were domesticated in the various core regions, depending on available local flora and fauna.
   3. Agricultural communities had to work cooperatively to clear land and create the water control systems needed for crop production. E. These agricultural practices drastically impacted environmental diversity. Pastoralists also affected the environment by grazing large numbers of animals on fragile grasslands, leading to erosion when overgrazed.
2. **Agriculture and pastoralism began to transform human societies.**
   1. Pastoralism and agriculture led to more reliable and abundant food supplies, which increased the population.
   2. Surpluses of food and other goods led to specialization of labor, including new classes of artisans and warriors, and the development of elites.
   3. Technological innovations led to *improvements in agricultural production, trade, and transportation*.

Required examples of ***improvements in agricultural production, trade, and transportation***:

* + - Pottery
    - Plows
    - Woven textiles
    - Metallurgy
    - Wheels and wheeled vehicles
  1. In both pastoralist and agrarian societies, elite groups accumulated wealth, creating more hierarchical social structures and promoting patriarchal forms of social organization.

**Key Concept 1.3.** The Development and Interactions of Early Agricultural, Pastoral, and Urban Societies

From about 5,000 years ago, urban societies developed, laying the foundations for the first civilizations. The term *civilization* is normally used to designate large societies with cities and powerful states. While there were many differences between civilizations, they also shared important features. They all produced agricultural surpluses that permitted significant specialization of labor. All civilizations contained cities and generated complex institutions, such as political bureaucracies, armies, and religious hierarchies. They also featured clearly stratified social hierarchies and organized long-distance trading relationships. Economic exchanges intensified within and between civilizations, as well as with nomadic pastoralists.

As populations grew, competition for surplus resources, especially food, led to greater social stratification, specialization of labor, increased trade, more complex systems of government and religion, and the development of record keeping. As civilizations expanded, they had to balance their need for more resources with environmental constraints such as the danger of undermining soil fertility. Finally, the accumulation of wealth in settled communities spurred warfare between communities and/or with pastoralists; this violence drove the development of new technologies of war and urban defense.

1. ***Core and foundational civilizations* developed in a variety of geographical and environmental settings where agriculture flourished.**

Required examples of ***core and foundational civilizations***:

* + - Mesopotamia in the Tigris and Euphrates River Valleys
    - Egypt in the Nile River Valley
    - Mohenjo-Daro and Harappa in the Indus River Valley
    - Shang in the Yellow River or Huang He Valley
    - Olmecs in Mesoamerica
    - Chavin in Andean South America

1. **The first states emerged within core civilizations.**
   1. States were powerful new systems of rule that mobilized surplus labor and resources over large areas. Early states were often led by a ruler whose source of power was believed to be divine or had divine support and/or who was supported by the military.
   2. As states grew and competed for land and resources, the more favorably situated — including the Hittites, who had access to iron — had greater access to resources, produced more surplus food, and experienced growing populations. These states were able to undertake territorial expansion and conquer surrounding states.
   3. Early regions of state expansion or empire building were Mesopotamia, Babylonia, and the Nile Valley.
   4. Pastoralists were often the developers and disseminators of *new weapons* and *modes of transportation* that transformed warfare in agrarian civilizations.
2. **Culture played a significant role in unifying states through laws, language, literature, religion, myths, and monumental art.**
   1. Early civilizations developed *monumental architecture and urban planning*.
   2. Elites, both political and religious, promoted *arts and artisanship*.
   3. *Systems of record keeping* arose independently in all early civilizations and subsequently were diffused.
   4. States developed legal codes, including the Code of Hammurabi, that reflected existing hierarchies and facilitated the rule of governments over people.
   5. *New religious beliefs* developed in this period continued to have strong influences in later periods.

Required examples of ***new religious beliefs***:

1. The Vedic religion
2. Hebrew monotheism
3. Zoroastrianism
   1. Trade expanded throughout this period *from local to regional and transregional*, with civilizations exchanging goods, cultural ideas, and technology.

Required examples of ***trade expansion from local to regional and transregional***:

1. Between Egypt and Nubia
2. Between Mesopotamia and the Indus Valley
   1. Social and gender hierarchies intensified as states expanded and cities multiplied.
   2. *Literature* was also a reflection of culture.