**Chapter 1**

*Chapter Summary*

The past is not really dead and gone, since it is continuously talked about and represented in the present, in the form of material traces and things people made and used. Archaeology and paleoanthropology are sciences that analyze and study those physical remains to produce accurate knowledge of the human past. Archaeology and paleoanthropology are relatively young disciplines, having formed as subfields of Anthropology during the late nineteenth and twentieth centuries. Before the development of a science of the past, most Westerners believed the Earth and all life on it were a product of divine creation a mere 6,000 years ago. Some natural scientists believed a series of catastrophes had determined the history of life on Earth. James Hutton and Charles Lyell advanced a different perspective, known as uniformitarianism. Based on careful observations and evidence, they described the natural world in terms of slow, steady, and uniform processes. This new perspective meant the age of the Earth had to be measured in millions of years. Discoveries of stone tools with the bones of extinct animals and the fossilized remains of early humans confirmed the great antiquity of humans. Through natural selection, Charles Darwin provided a unifying theory for explaining the long-term processes of biological change and diversity. Nineteenth-century cultural anthropologists and archaeologists devised schemes for understanding societal change in terms of cultural evolution, but accurate knowledge of human evolution, both cultural and biological, would come only with the substantive discoveries of twentieth-century archaeology and paleoanthropology.