

# Pathfinder: Gardens of Civilization

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Dawn M. Sullivan  
Shaker Heights Middle School  
Spring 2010 Workshop:

- **Crossing Boundaries, Bridging the Gap: Connecting Museums, Schools, and Libraries**  
7<sup>th</sup> grade Social Studies  
World History: Gardens of Civilization-Math and Science

## Academic Content Standards

### Social Studies

**HISTORY**—Students use materials drawn from the diversity of human experience to analyze and interpret significant events, patterns and themes in the history of Ohio, the United States and the world.

**Benchmark B:** *Describe the political and social characteristics of early civilizations and their enduring impact on later civilizations.*

**PEOPLE IN SOCIETIES**—Students use knowledge of perspectives, practices and products of cultural, ethnic and social groups to analyze the impact of their commonality and diversity within local, national, regional and global settings.

**Benchmark A:** *Compare cultural practices, products and perspectives of past civilizations in order to understand commonality and diversity of cultures.*

**Benchmark B:** *Analyze examples of interactions between cultural groups and explain the factors that contribute to cooperation and conflict.*

**Benchmark C:** *Explain how contact between different cultures impacts the diffusion of belief systems, art, science, technology, language and forms of government.*

**GEOGRAPHY**—Students use knowledge of geographic locations, patterns and processes to show the interrelationship between the physical environment and human activity, and to explain the interactions that occur in an increasingly interdependent world.

**Benchmark B:** *Define and identify regions using human and physical characteristics.*

**Benchmark C:** *Explain how the environment influences the way people live in different places and the consequences of modifying the environment.*

**Benchmark D:** *Explain reasons that people, products and ideas move from place to place and the effects of that movement on geographic patterns.*

**ECONOMICS**—Students use economic reasoning skills and knowledge of major economic concepts, issues and systems in order to make informed choices as producers, consumers, savers, investors, workers and citizens in an interdependent world.

**Benchmark B:** *Explain why trade occurs and how historical patterns of trade have contributed to global interdependence.*

GOVERNMENT—Students use knowledge of the purposes, structures and processes of political systems at the local, state, national and international levels to understand that people create systems of government as structures of power and authority to provide order, maintain stability and promote the general welfare.

**Benchmark A:** *Explain why people institute governments, how they influence governments, and how governments interact with each other.*

SOCIAL STUDIES SKILLS AND METHODS—Students collect, organize, evaluate and synthesize information from multiple sources to draw logical conclusions. Students communicate this information using appropriate social studies terminology in oral, written or multimedia form and apply what they have learned to societal issues in simulated or real-world settings.

**Benchmark A:** *Analyze different perspectives on a topic obtained from a variety of sources.*

**Benchmark B:** *Organize historical information in text or graphic format and analyze the information in order to draw conclusions.*

## Technology

Nature of Technology—Students develop an understanding of technology, its characteristics, scope, core concepts and relationships between technologies and other fields.

**Benchmark A:** *Analyze information relative to the characteristics of technology and apply in a practical setting.*

**Benchmark B:** *Apply the core concepts of technology in a practical setting.*

Technology and Society Interaction—Students recognize interactions among society, the environment and technology, and understand technology's relationship with history. Consideration of these concepts forms a foundation for engaging in responsible and ethical use of technology.

**Benchmark A:** *Analyze technologically responsible citizenship.*

**Benchmark B:** *Describe and explain the impact of technology on the environment.*

Technology and Communication Applications—Students use an array of technologies and apply design concepts to communicate with multiple audiences, acquire and disseminate information and enhance learning.

**Benchmark C:** *Select appropriate technology communication tools and design collaborative interactive projects and activities to communicate with others.*

Technology and Information Literacy—Students engage in information literacy strategies, use the Internet, technology tools and resources, and apply information-management skills to answer questions and expand knowledge.

**Benchmark B:** *Use technology to conduct research and follow a research process model which includes the following: developing essential question; identifying resources; selecting, using and analyzing information; synthesizing and generating a product; and evaluate both process and product.*

**Benchmark C:** *Develop search strategies, retrieve information in a variety of formats and evaluate the quality and appropriate use of Internet resources.*

## Library

**INFORMATION LITERACY**—Effective school library media programs provide information literacy skills instruction.

**Benchmark B:** *Identify information needs, select school library media books and materials in a variety of formats, and demonstrate responsible use and ethical behavior when using library media materials.*

**Benchmark E:** *Conduct research and follow a research process model that includes the following: develop essential question; identify resources; select, use and analyze information; synthesize and generate a product; and evaluate both process and product.*

**TECHNOLOGY LITERACY**—Effective school library media programs provide technology literacy skills instruction in the use of library-based technologies.

**Benchmark A:** *Use the online public access catalog to locate school library materials for classroom assignments and personal interests.*

**Benchmark C:** *Select, access and use appropriate electronic resources for a defined information need.*

**MEDIA LITERACY**—Effective school library media programs support the learning of media literacy skills in collaboration with classroom teachers, technology integration specialists and technology coordinators.

**Benchmark A:** *Comprehend that media communications deliver information and messages to a specific audience for a specific purpose, and analyze the intended impact of media communications and messages when delivered and received by a specific audience.*

## Books

### Nonfiction

Anderson, Dale. *Ancient China*. Chicago, Illinois : Raintree, 2005.

This title examines what Chinese art reveals about its history and simultaneously how history explains the art. It explores the Chinese civilization through both the images it produced and cultural artifacts that remain. The title focuses on how art and architecture from a distinct period reflect life at the time, and how we can use the surviving art to understand how people used to live.

Barter, James. *The Ancient Persians*. San Diego, Calif. : Lucent Books, 2005.

The ancient Persians created a society in which art and architecture flourished alongside religion and law even though the mighty Persian Empire fell after a little more than two centuries, its influence remained strong for years to come.

Beshore, George. *Science in early Islamic culture*. New York : F. Watts, 1988.

This title discusses the extraordinary scientific discoveries and advancements in the Islamic

world after the birth of Mohammed in 570 and their impact on Western civilization in subsequent centuries and today.

Capek, Michael. *Emperor Qin's terra cotta army*. Minneapolis, MN : Twenty-First Century Books, c2008.

The book describes the discovery of the great clay army buried near China's Emperor Qin's tomb.

Casson, Lionel. *Ancient Egypt*. New York : Time, [c1965].

This fascinating book describes how Japan grew from rule by local chieftains to an emperor-led nation with many noble families competing for prominence.

Cheong, Jack. *Origins of Chinese martial arts*. Singapore : Asiapac Books, c2002.

Translated from Chinese, these nonfiction books use the graphic novel format to explain Chinese culture.

Dalal, Anita. *Ancient Egypt*. Redding, Conn. : Brown Bear Books, c2009.

With dozens of entries describing the history of ancient civilizations and the landscapes on which they thrived, this reference series uses double-page maps, reconstructed artworks, and photographs to provide invaluable information about the great cultures of the past. The insightful text along with illustrations and photography will give readers a solid base for any research project and learning.

De Medeiros, James. *Parthenon*. New York : Weigl Publishers, c2008.

The book shows the connection of the ancient architecture wonder with modern buildings and structures.

Fu, Chunjiang. *Origins of Chinese food culture*. Singapore : Asiapac Books, 2007.

Translated from Chinese, these nonfiction books use the graphic novel format to explain Chinese culture.

Fu, Chunjiang. *Origins of Chinese names*. Singapore : Asiapac Books, 2007.

Fu, Chunjiang. *Origins of Chinese people and customs*. Singapore : Asiapac Books, 2004.

Fu, Chunjiang. *Origins of Chinese science and technology*. Singapore : Asiapac Books, 2004.

Fu, Chunjiang. *Origins of Chinese tea and wine*. Singapore : Asiapac Books, 2004.

Harris, Geraldine. *Ancient Egypt*. New York : Chelsea House, 2007.

The book presents a clear and engaging history of ancient Egyptian civilization with maps that are fully detailed and easy to use as well as having stunning photographs of archaeological artifacts and ruins offer the reader abundant information. The atlas is divided into two sections: "The History of the Pharaohs" tells the story of Egypt from the unification of the country in

about 2920 BCE to the coming of the Romans almost 3,000 years later. Sections discuss the power of the pharaoh, burial customs, the Egyptian army, and women in Egypt.

Hull, Robert. *Everyday life*. New York : Franklin Watts, 1999.

The book describes how the Greeks lived, played, worked, and fought.

Hull, Robert. *Entertainment & the arts*. New York : Franklin Watts, 1999.

It describes the various arts and amusements enjoyed in ancient Greece, including storytelling, poetry performances, music, dancing, plays, statues, sports, and paintings.

Landau, Elaine. *The Assyrians*. Brookfield, CT : Millbrook Press, 1997.

Explore the history of three of the most influential cultures to emerge from the Middle East region known as Mesopotamia.

Li, Xiaoxiang. *Origins of Chinese art and craft*. Singapore : Asiapac Books, c2006.

Translated from Chinese, these nonfiction books use the graphic novel format to explain Chinese culture.

Li, Xiaoxiang. *Origins of Chinese culture*. Singapore : Asiapac Books, 2005, c2001.

Translated from Chinese, these nonfiction books use the graphic novel format to explain Chinese culture.

Lim, S. K. *Origins of Chinese language*. Singapore : Asiapac, 2009.

Translated from Chinese, these nonfiction books use the graphic novel format to explain Chinese culture.

Lim, S. K. *Origins of Chinese music*. Singapore : Asiapac Books, 2007.

Translated from Chinese, these nonfiction books use the graphic novel format to explain Chinese culture.

Malam, John. *Ancient Egyptian jobs*. Chicago, Ill. : Heinemann Library, c2003.

It takes a close look at several different jobs of the ancient Egyptians.

Manning, Ruth. *Ancient Egyptian women*. Chicago : Heinemann Library, c2003.

History, archaeological evidence, and primary-source material combine to vividly portray daily life in ancient cultures. It examines ancient life in-depth, allowing readers to make comparisons with their own lives.

McNeill, Sarah. *Ancient Egyptian people*. Brookfield, Conn. : Millbrook Press, 1997.

The book describes the everyday lives of thirteen ancient Egyptian people through the use of quotations and illustrations of the time.

Middleton, Haydn. *Ancient Greek homes*. Chicago, Ill. : Heinemann Library, c2003.

It examines the homes and lives of families in ancient Greek culture.

Middleton, Haydn. *Ancient Greek jobs*. Chicago, Ill. : Heinemann Library, c2003.

Discusses ideas held about work in ancient Greece and describes various occupations and what they entailed.

Middleton, Haydn. *Ancient Greek war and weapons*. Chicago, Ill. : Heinemann Library, c2003.

It examines the weapons and warfare of the ancient Greek culture.

Middleton, Haydn. *Ancient Greek women*. Chicago, Ill. : Heinemann Library, c2003.

History, archaeological evidence, and primary-source material combine to vividly portray daily life in ancient cultures as the book examines the ancient life of women in Greek culture.

Murrell, Deborah Jane. *The best book of ancient Rome*. Boston, Mass. : Kingfisher, 2004.

The social life and customs, history, Roman Republic history, are described and beautifully illustrated with two pages for each topic.

Nardo, Don. *Artistry in stone: great structures of ancient Egypt*. San Diego, Calif. : Lucent Books, 2005.

The ancient Egyptians were great builders. In addition to the famous pyramids, they erected magnificent temples and palaces, giant statues of the pharaohs, and towering obelisks, as well as the Great Lighthouse at Alexandria, one of the Seven Wonders of the Ancient World. All are explored in this volume, along with detailed explanations of the materials and techniques used in their construction.

Nardo, Don. *Arts, leisure, and sport in ancient Egypt*. San Diego, Calif. : Lucent Books, 2005.

The many arts and crafts at which the Egyptians excelled and the numerous leisure pastimes they pursued are examined in detail in this enlightening book. Among the crafts covered are pottery- and glass-making, spinning and weaving, painting, sculpture and jewelry-making. Other chapters are devoted to Egyptian writing systems and literature, as well as activities such as music, dancing, wrestling, archery and hunting.

Nardo, Don. *Mummies, myth, and magic: religion in ancient Egypt*. San Diego, Calif. : Lucent Books, 2005.

The ancient world examines Egypt's gods, creation myths, beliefs about the afterlife, tombs (and efforts to thwart tomb robbers), embalming techniques, magic spells, amulets, hymns and prayers and much more.

Nardo, Don. *People of the Nile: rhythms of daily life*. San Diego, Calif. : Lucent Books, 2005.

The historical perspective and vivid pictures of the Nile River cultural, politics and social life are fully documented with primary and secondary source quotations.

Nardo, Don. *The Roman army: an instrument of power*. San Diego, Calif. : Lucent Books, c2004.

The title presents a history of Rome's army, including its organization, tactics, and major battles and campaigns.

Schomp, Virginia. *Ancient India*. New York : Franklin Watts, c2005.

Take a look at the history of ancient India as it dates back thousands of years and its geographical changes as well as religious influences on the culture, politics and history.

Service, Pamela F. *The ancient African Kingdom of Kush*. New York : Marshall Cavendish, 1998.

It presents historically important cultural information as it examines both the political and the history of ancient Kush.

Williams, Brian. *Ancient Roman jobs*. Chicago, Ill. : Heinemann Library, c2003.

The book presents an account of the skills and jobs that were necessary to run a city in ancient Roman times.

Williams, Brian. *Ancient Roman homes*.

With the use of archeological evidence and primary sources this title traces all aspects of Ancient Roman households by examining the family life, living in the country as compared to the city life, ways homes were heated, entertainment and lots more.

Williams, Brian. *Ancient Roman war and weapons*. Chicago : Heinemann Library, c2003.

This book is a color-illustrated overview of ancient Rome's military forces, weapons, and warring techniques and includes a time line and a further-reading list.

Williams, Brian. *Ancient Roman women*. Chicago : Heinemann Library, c2003.

With the use of archeological evidence and primary sources this title traces all aspects of Ancient Roman women from marriage to being mothers, to running the house to working and much more.

Woods, Michael. *Ancient medicine: from sorcery to surgery*. Minneapolis : Runestone Press, 2000.

Ancient Technology provides a fascinating look at a particular area of technology as it developed in ancient times, from the first humans to the fall of the Western Roman Empire in A.D. 476. Each chapter covers a different ancient civilization, beginning with Stone Age cultures and progressing chronologically through others, such as the ancient Middle East, Egypt, China, Mesoamerica, Greece, Rome, and India.

Xu, Shidao. *Origins of Chinese cuisine*. Singapore : Asiapac, 2005.

Translated from Chinese, these nonfiction books use the graphic novel format to explain Chinese culture.

## Videos

Basehart, Richard. *Egypt quest for eternity*. Wynnewood, PA : Schlessinger Media, c2005.

Through examining the river Nile culture, one learns about the birth of one of history's great

civilizations: the ancient Egyptians. One will learn how they created and constructed the most glorious monuments the world has ever seen.

Dempster, Jeanie. *The Eastern empires*. West Long Branch, NJ : Kultur, c2001.

The early empires of the east are perhaps the most fascinating of all ancient civilizations, especially the societies and cultures of China and Japan. This video explores the truth behind these ancient peoples, looking particularly at Japan's vault of the samurai and the empire's martial arts.

*Life in ancient Rome*. Chicago, IL : Encyclopaedia Britannica Educational Corporation, 1964.

It examines the characteristics and achievements of the Roman Empire at the height of its power; points out some of the weaknesses in Roman society; and considers the ways in which Roman ideas and culture influenced the development of Western civilization.

Mole, Ben. *Machines III*. New York : A&E Television Networks ; marketed and distributed in the U.S. by New Video, c2007.

This program unveils the remarkable story of how China created a myriad of ingenious devices including cosmic machines able to collect data on the stars, hydraulic hammers, water-controlled clocks and even paper. China was an industrial superpower, armed with devices such as heaven carts' able to drill down deep underground, geared milling machines and mass production plants powered by water.

Schlessinger, Andrew. *Ancient Mesopotamia*. Wynnewood, Pa. : Schlessinger Media, c2004.

The view gets a chance to join archaeologist Arizona Smith and a young detective-in-training as they unlock the mysteries of the ancient Sumerian, Assyrian and Babylonian civilizations.

Südwestrundfunk (Germany). *Ancient Greco-Roman cultures*. Wynnewood, PA : Schlessinger Media, c2005.

It discusses some of the ancient civilizations that flourished in and around the Aegean Sea by visiting the site of Troy, famed city of Homer's Iliad; Paphos, the supposed birthplace of Aphrodite; the ancient thermal spa of Hierapolis, with its petrified waterfalls and terraced basins.

Südwestrundfunk (Germany). *Ancient India*. Wynnewood, PA : Schlessinger Media, c2005.

The video takes a look at India's long history and civilization, with special reference to the Mughal Empire. They visit the Taj Mahal, the Red Fort of Agra, the city of Lahore and Fatehpur Sikri, and the 16th century capital city of the Mughal Empire.

## INFOhio Databases

**The ART Collection:** The ART Collection provides high-quality, digital images of works of art from museums around the world. Cultures and time periods represented range from contemporary art, Native American and Inuit art, to ancient Greek, Roman, and Egyptian works, along with Japanese and Chinese works.

Example of pieces (science)

- Stirrup-spouted jar: pre-Columbian, South American (shows technical craftsmanship)
- Amphora/Psykter: ancient Greece (shows arms/weaponry)

- Barber cutting a man's hair: ancient Greece (shows technology/tools)
- Model sarcophagus of Irethoru: ancient Egypt (shows technological skills)

**Digital Video Collection:** free electronic database available to all Ohio schools. Videos can be viewed as flash videos or saved to a computer for 45 days.

Examples of videos (ancient cultures)

- Ancient Rome: a journey back in time
  - Describe the political and social characteristics of early civilizations and their enduring impact on later civilizations and the enduring impact of early civilizations in India, China, Egypt, Greece and Rome after 1000 B.C.
- INFOhio:21st Century Tools and Electronic Resources for Students, Teachers, and Parents : this chapter focuses on the ART Collection (as a teacher resource)
- Great pyramids
  - A visit to the burial sites of the mighty Pharaohs of Egypt, one of the most awe-inspiring sights in the world. The Program provides a glimpse into Egyptian culture.
- Archaeology
  - This video studies the science of archaeology as well as the study of ancient artifacts used to help historians and scientist understand the past.

**EBSCO Host:** articles from more than 6,000 magazines and newspapers in full text formats.

Example of articles

- “Aquifer believed to have supplied old Rome located.” *Irish Times*, 1/30/10.
- Bryant, Vaughn M. “Ready, Aim, Fire!” *dig*, April 2010.
- Lu, Alice-Yanhong . “What is Math” *Creative Kids*, Spring 2010.

**Science Online:** encyclopedia articles, biographies, charts, graphs, illustrations and videos on a variety of mathematics and science related topics

Example of articles:

- “Ancient and Modern Agriculture” from *Biotechnology on the Farm and in the Factory*

## Websites for Educators

**EMuseum@ Minnesota State University in Mankato**

**Study of World Religions:** <http://www.mnsu.edu/emuseum/cultural/religion/index.html>

A basic study of six world religions with history, basic beliefs, terms and links: Islam, Judaism, Buddhism, Christianity, Hinduism, and Jainism.

## **Exploratorium**

**Digital Library-Learning Resources Collection:**

[http://nsdl.exploratorium.edu/nsdl/search\\_results.vm?qid=SAQ-2412&itemsPerPage=10&index=0](http://nsdl.exploratorium.edu/nsdl/search_results.vm?qid=SAQ-2412&itemsPerPage=10&index=0)

Teachers can download several of the learning resources to use with their students. Each includes a summary, grade levels and topics they cover. The best for the World Cultures unit are CANdemonium Activity (students make musical instruments from a the bottom of cans), Make Your Own Petroglyph, Make Your Own Rain Stick, Mayan Calendar Round, and Sweet Lure of Chocolate.

## **The Field Museum**

**On-line Interactive:** [http://www.fieldmuseum.org/exhibits/online\\_interactive.htm](http://www.fieldmuseum.org/exhibits/online_interactive.htm)

Students will need to be guided on which online activity to participate in because there are some that are not relevant to the topic of World Cultures. Nevertheless, Chocolate: the Manufacturing Chocolate from Seed to Sweet is a great one for them to use to learn about the science behind chocolate. Others worth having students do are Project ER, Science in Action and Tutankhamen and the Golden Age of Pharaohs.

## **Smithsonian National Museum of African Art**

**Playtime! Hide and Seek:** <http://africa.si.edu/exhibits/multimedia.html>

Designed for families and kids, but would be best used by educators as an extension for the unit. The activity book under the Family Activity Guide can be downloaded and printed out as an extension to the unit or for extra credit. The identifying games such as matching or counting can be used when students have completed other work or as part of a station. There are fourteen activities all together in this section of the museum's website.

**Victoria and Albert Museum:** <http://www.vam.ac.uk/index.html>

The Victoria and Albert Museum's website is massive! There are many links that take the visitor deeper and deeper into the site. The area for educators is very useful. They design of the links are logical and the steps taken are always displayed on the left hand side of the screen. There are links to the collection and information on English Architecture, Buddhism, Japanese Art, Islamic Designs and much more. All of which can support the unit on World Cultures because the museum has over 100 galleries and about 7 million pieces of art!

[http://www.vam.ac.uk/school\\_stdnts/schools/teachers\\_resources/index.html](http://www.vam.ac.uk/school_stdnts/schools/teachers_resources/index.html)

## **Websites for Students**

**Smithsonian National Museum of Natural History**

**African Voices:** <http://www.mnh.si.edu/africanvoices/>

The National Museum of Natural History has several interactive exhibits online and the one dedicated to Africa is perfect for the World Cultures unit. The timeline gives a general history of Africa, Africans in Spain, the slave trade, Mali and Ethiopia, colonialism and modern Africa. The themes focus on Africa's wealth and market places, working and living in Africa, and African religious influences. The students can make a mudcloth online and print it out, do the money matching currency game, can visit a market place in Accra to learn about trade as well as hear the sounds of the market, or listen to Somali men and women tell about their traveling culture.

### **Smithsonian National Museum of Natural History**

#### **Nutrients for Life: Humanity Against Hunger:**

<http://www.nutrientsforlife.org/leaders/teachers/online/humanity/>

An interactive website where students volunteer and learn about the food shortage in Africa by studying the nutrient deficiencies in the soil that affect the growth of plants and how to use fertilizers to help farmers yield a more bountiful harvest.

#### **Victoria and Albert Museum:**

[http://www.vam.ac.uk/school\\_stdnts/schools/pupils/webquests/index.html](http://www.vam.ac.uk/school_stdnts/schools/pupils/webquests/index.html)

The links to their webquests are collection and information from their 9 national museums and galleries. The first thing the "learner" should do is watch the instruction video which explains how the site is designed. The learner can browse and play around or do a search for specific topics. First they select a "key stage" then a "subject area" then from there a webquest. Each webquest has a summary of how long it will take to complete it and a bit of information on the collection. If the learner is not able to finish the quest, s/he can return at a later time to complete it. For the World Cultures unit, students can use the following webquests to expand their understanding: "Palaces and Mosques", "Why was Akbar great?", "Design a souvenir", "Masks around the World", "Radiant Buddha", "Chinese New Year", just to name a few.

<http://nmolp.vam.ac.uk/webquests/>