



Big Era Four
Expanding Networks of Exchange and Encounter
1200 BCE - 500 CE



Panorama Teaching Unit
Expanding Networks of Exchange and Encounter
1200 BCE – 500 CE

[PowerPoint Overview Presentation](#)
[Expanding Networks of Exchange and Encounter](#)

Table of Contents

Why this unit?	2
Unit objectives	2
Time and materials	2
Author	2
Introductory activity: Pre-assessment	3
Lesson 1: Population growth	5
Lesson 2: Networks of exchange	7
Lesson 3: An age of empires	10
Lesson 4: Summarizing activity: Synetics	12
Final assessment	15
Extension activities	18
Essential vocabulary	19
This unit and the Standards in Historical Thinking	20
Resources	20
Correlations to National and State Standards	23

Why this unit?

Big Era Four is the period when the first long-distance networks of exchange were established, linking distant regions of Afroeurasia together. Ideas, goods, and technologies flowed along these networks, fueling a dramatic increase in collective learning. Small-scale, isolated, regional “worlds” merged to make up a significantly larger, more connected world. Leaders of empires created and used the new networks to build, manage, and maintain vast territories for long periods of time. The events of this Big Era, therefore, represent a major step along the road toward the interconnected and interdependent world we live in today. The lessons in this unit require students to interact with the material in the PowerPoint Overview Presentation, using either a computer or a hard copy printed from a computer.

Unit objectives

Upon completing this unit, students will be able to:

1. Explain the surge in population growth during this Big Era.
2. Describe some social and environmental consequences of population growth.
3. Identify and locate major networks of exchange established in Afroeurasia during this Big Era.
4. Describe changes resulting from new cultural encounters.
5. Identify the world religions and belief systems that flourished during this era.
6. Give reasons for the rise of large, enduring empires during this Big Era.

Time and materials

Time: 3 to 5 class periods

Materials:

- software package such as *Inspiration* (optional)
- computer lab or single machine with projection system
- *PowerPoint* or *PowerPoint Viewer*
- historical atlas
- internet access or access to reference materials, newspapers, and journals

Authors

Ernest O’Roark and Eileen Wood are teachers at Dr. Martin Luther King, Jr. Middle School in Germantown, Maryland. They have collaborated for a number of years on curriculum and literary projects. Their historical fiction appears in *Kongo: A Kingdom Divided*, a teaching unit published by the NCHS. Both teachers joined the World History for Us All Development team in 2001.

Introductory activity: Pre-assessment

Preparation: For this pre-assessment activity, use a style of “thought web” or “mind map.” One model is a graphic organizer software package titled *Inspiration*. (See www.inspiration.com.) If computers are unavailable to students, prepare transparencies of different styles of thought webs that students might use as potential models for creating their own. Presentation of a completed thought web on a different topic or era of history might also be useful.

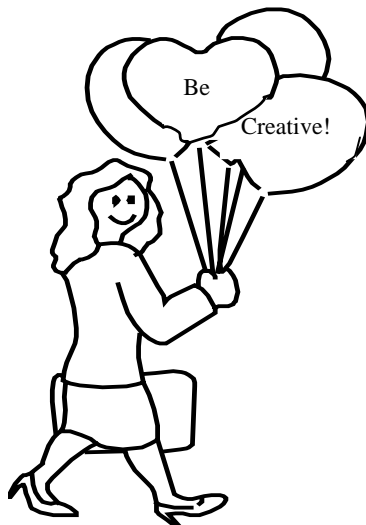
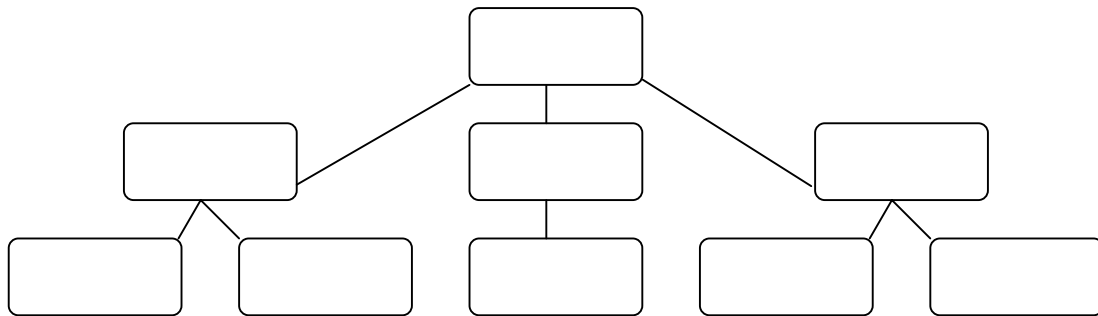
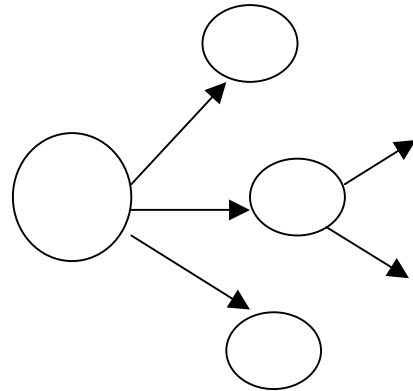
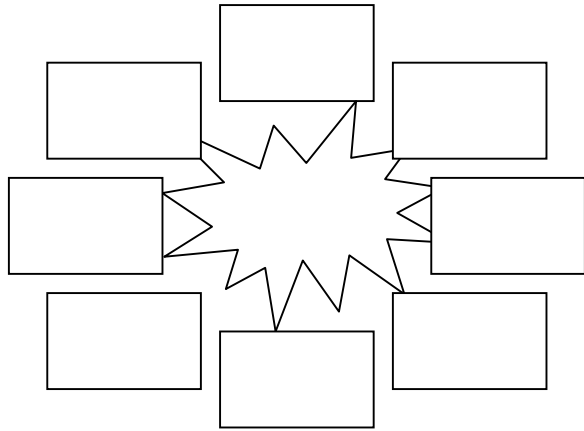
Introduction: Explain to students that the lessons in this teaching unit present a sweeping view of Big Era Four (1200 BCE - 500 CE). Explain that the activity they are about to complete is a pre-assessment. Students who already know some things about this Big Era may study parts of the unit in a different way from or at greater depth than other students, for whom this period is unfamiliar. The pre-assessment will be an opportunity for both teacher and students to inventory what they already know about the era.

1. If students have studied Big Era Three, ask them to think about the kinds of changes that took place and what was happening at the end of that era.
2. Explain to students that their task is to create a thought web containing as much knowledge as possible about Big Era Four.
3. If students are unfamiliar with thought webs for this sort of task, use Inspiration or other software to model the process, or use transparencies to show some examples.
4. Emphasize to students that they may use any web design they like, including their own designs. Encourage them to be creative. Also explain that at this stage of the unit, a web may contain little information. The empty spaces are themselves useful information because they indicate how much is yet to be learned.
5. Have students work independently to complete their webs. Use the webs for planning and for use in the final assessment.

Introductory activity: Pre-assessment

Student Handout 0.1

Draw or use a software program such as Inspiration to create a thought web of all the important information you know about Big Era Four (1200 BCE - 500 CE). Your web may include concepts, trends, developments, events, and other relevant information about the era. Be as detailed and as accurate as you can.



Lesson One

Population Growth

Preparation

This activity uses the first section of the Big Era Four PowerPoint Overview Presentation. The content of the presentation may be made available to students in several ways. In a computer lab, students may work individually or in small groups directly with the PowerPoint Overview Presentation. Using a single computer and a projection device, a teacher may lead the full class through a reading of the section. If this option is chosen, the teacher should prepare hard copies of the two slides summarizing Population Growth (both with the text “Population Growth In Summary”). Students may refer to these slides later or take notes on them from the screen. A third alternative is to create hard copy packets containing the entire Population Growth section of the PowerPoint Overview Presentation (about 20 slides.)

Introduction

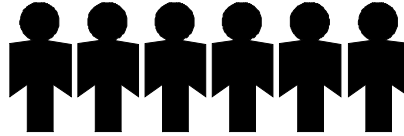
Using the Big Era Four PowerPoint or through discussion, explain briefly the idea of the two key developments presented for this era (Population Growth and Expanding Networks of Exchange). Explain that in this first activity, students will investigate Population Growth, the first of the two key developments.

1. Instruct students to view the presentation using one of the methods described above.
2. Give out Student Handout 1.1 and review the directions. Instruct students to use the Big Era Four PowerPoint Overview Presentation to complete the activity.
3. Have students share and discuss the predictions made in response to the third question. Do not at this point reveal an answer, but explain that it may be possible to evaluate the accuracy of their predictions in a later section. At the end of the final lesson, return to this question and have students discuss again their hypotheses.

Lesson 1

Student Handout 1.1

**Population Growth
1200 BCE - 500 CE**



1. View the key development section *Population Growth* in the Big Era Four PowerPoint Overview Presentation. Notice that the presentation focuses on two questions: “What caused this surge in population?” and “What were the consequences of this growth?” The presentation explains the answers to these two questions. At the end of each explanation, there is a summary. Use the summaries to help you answer these two questions.

2. Between 1000 BCE and 1 CE world population rose from about 120 million to 250 million. Many factors contributed to this accelerating growth. Explain how each of these factors would have contributed to population growth.

3. The surge in population was not without consequences. From time to time during this era famines (shortages of food) occurred in some places. How might any of the consequences described have caused or contributed to a famine?

4. Notice that between 100 and 500 CE, the number of large cities declined. What do you think might have been responsible for this decline?

Lesson Two

Networks of Exchange

Preparation

This activity uses the second section of the Big Era Four PowerPoint Overview Presentation. See the Population lesson plan for ways to make the content accessible to students. Student Handout 2.1 should be duplicated, one per student.

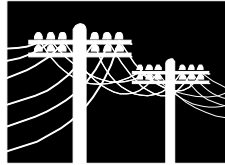
Introduction: Explain to students that in the next set of activities they will be exploring networks of exchange, the second key development of this era. Review with students the overview of this topic provided in the PowerPoint Overview Presentation.

1. Hand out the Networks of Exchange worksheet.
2. Review the directions for Part I and then have students complete it individually.
3. Discuss Part I and record students' ideas on the board or overhead.
4. Review the directions for Part II, then have the students complete it individually.
5. Discuss Part II and adjust the list on the board or overhead accordingly.
6. Instruct students to view the second section of the Big Era Four PowerPoint Overview Presentation as directed in Part III of the worksheet.
7. Have students use what they have learned to complete Part IV of the activity independently.

Lesson 2

Student Handout 2.1

**Networks of Exchange
If You Wanted To . . .**



Directions: Complete Parts I and II of this worksheet before viewing the Networks of Exchange section of the Big Era Four PowerPoint Overview Presentation.

Part I

1. If you wanted to buy a product that was not available in your local town or city, how could you do it? List as many ways as you can think of.

2. If you wanted to give a message to someone living 1,000 miles away, how could you do it? List as many ways as you can think of.

3. If you wanted to learn about religions, customs, or traditions other than your own, how could you go about finding that information? List as many ways as you can think of.

Part II

Next, imagine that you are living at the beginning of Big Era Four, around 1200 BCE. Look at your answers to the three questions above, cross off your lists all methods of exchange that did not exist in that era.

Part III

Now view the section of the Big Era Four PowerPoint Overview Presentation called Networks of Exchange.

Part IV

4. How did the development of interregional networks of exchange and alphabetic writing systems contribute to the spread of world religions?

Lesson Three

An Age of Empires

Preparation

This activity refers to the two slides in the Big Era Four PowerPoint Overview Presentation that relate Expanding Networks to empires. See Lesson 1 (Population Growth) to plan for ways to make the content accessible to students. The Student Handout 3.1 “An Age of Empires” should be duplicated.

Introduction

Urge students to keep in mind everything they have learned so far about population growth and networks of exchange, since an understanding of these key developments will help them in the activities in this lesson.

1. Hand out Student Handout 3.1 (An Age of Empires) and review the directions.
2. Explain to students how food recipes are written. Show or read to students some examples of real recipes. Discuss what sorts of things are included in a recipe (ingredients, quantities, procedures, preparation times)
3. Have students view the PowerPoint Overview Presentation map titled “Large Empires of Afroeurasia, 500 BCE – 500 CE.” Organize students into small groups and ask them to pick one of the empires shown on the map. Remind students that some of these empires lasted much longer than others, but all had an important impact on world history.
4. Have each small group research basic information about the empire they have chosen. For this research students may use textbooks, encyclopedias, or reliable, up-to-date web sites.
5. Have each group apply what it has learned to writing a recipe for a successful and lasting empire.
6. Have each group share its recipe with the class. An additional option: gather the recipes together to form a class “Empire Cookbook” that could be shared with other classes.

Lesson 3***Student Handout 3.1*****An Age of Empires
1200 BCE – 500 CE**

Big Era Four has been called an “Age of Empires” because during that era several large enduring empires emerged in both Afroeurasia and the Americas. In earlier eras, most empires were relatively small and did not usually survive for such long periods of time as some empires did in Big Era Four. Apparently, some political and military leaders in this era learned the “recipe” for creating successful and long-lived empires.

Directions: Working in small groups, pick one of the empires shown on the map titled Empires of Afroeurasia, 500 BCE – 500 CE in the PowerPoint Overview Presentation. Research basic information about the empire you have chosen. For this research you may use textbooks, encyclopedias, or reliable, up-to-date web sites. Apply what you have learned to compose a “recipe” for a successful and long-lasting empire. Remember that a recipe for a good dish includes ingredients, quantities, procedures, preparation time, and so on.



Photo by R. Dunn

Lesson Four

Summarizing Activity: Synectics

Preparation

Duplicate the Synectics worksheet. Decide if students will do this activity individually or in groups of four. Obtain chart paper and markers if the activity will be done in groups.

Introduction

Explain to students that, having explored the key developments of this era, now they need to connect and summarize what they have learned into one “big picture.” One mental game for accomplishing this is called synectics.

1. Instruct students to make a list of four objects. This list must be made up of nouns, that is, names for things, rather than adjectives or verbs. Beyond this requirement, there are no other restrictions on what sorts of objects can be on their list.
2. Hand out the Synectics activity sheet. Review the directions and discuss the example.
3. Have students complete the activity. If students are working in groups of four, instruct them to discuss their ideas as a group, then select their four favorite ideas to illustrate. Each student in the group will then complete one quadrant of a large sheet of chart paper.
4. Have students share their synectics. If they are using chart paper, have them hang the papers around the room. Each group might then explain some or all of their synectics. Or, students might perform a “gallery walk” to read and react to one another’s work. As the synectics are shared, discuss them. Ask students to explain the connections they have made. Opportunities to connect and clarify important concepts of the unit will likely arise from this discussion.

Lesson 4

Student Handout 4.1

Synectics

Synectics is an approach to creative thinking that depends on comparing what appear, on the surface, to be unrelated concepts, then drawing relevant conclusions.

Directions: Think of four common objects. Sketch a picture of each of the four objects in one of the boxes below. Write a caption for each that begins: Big Era Four was like a (insert name of object) because (complete the analogy by giving an explanation).

Example:



Big Era Four is like a pencil because pencils can be used for alphabetic writing, an invention of that era.

Lesson 4***Student Handout 4.2—Thought Web Rubric*****The Age of Empires
Thought Web Rubric**

For a score of 4, the completed thought web:

1. clearly identifies all three key developments of this era.
2. includes many elements that help explain the significance of each development.
3. includes elements that show connections among the three developments.
4. includes details that elaborate on or give examples of important ideas from the unit.

For a score of 3, the completed thought web:

1. clearly identifies all three key developments of this era.
2. includes some elements that help explain the significance of each development.
3. includes elements that show connections among the three developments.

For a score of 2, the completed thought web:

1. clearly identifies all three key developments of this era.
2. includes some elements that help explain the significance of at least two of the developments.

For a score of 1, the completed thought web:

1. identifies none or only some of the three key developments of this era.
2. includes no or very few elements that help explain the significance of any of the developments.

Final Assessment

Preparation

If a computer lab and graphic organizer software are available, arrange for its use for the assessment. Duplicate the “Age of Empires Thought Web Rubric.”

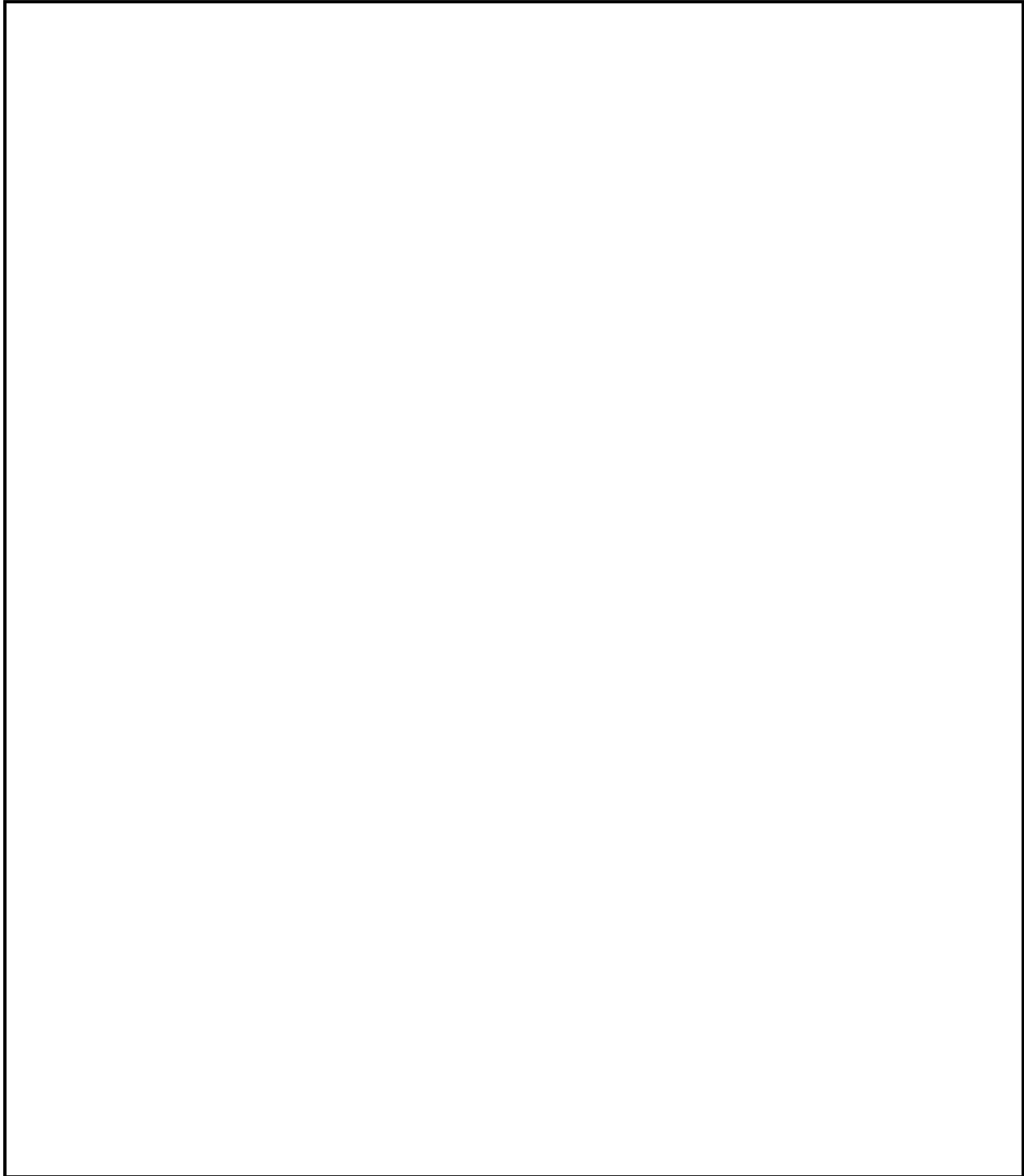
Introduction

Remind students of the thought web they completed as a pre-assessment. Explain that the final assessment for the unit will be the completion of this same task.

1. Hand out and review the “Age of Empires Thought Web Rubric” (Student Handout 4.2). Also hand back students’ pre-assessments. Students may be allowed to use the pre-assessment as a reference on the final assessment. More likely, it will simply help them to realize how much they have learned doing this unit.
2. Instruct students to use the rubric as a guide to completing the thought web.
3. Have students compete the web.

Final Assessment
Student Handout 1

Create a thought web of all the important information you know about Big Era Four. Your web must include concepts, trends, developments, events, and other relevant information about the era. Be as detailed and as accurate as you can.

A large, empty rectangular box with a black border, intended for students to create a thought web about Big Era Four. The box is currently blank.

Extension Activities

Preparation

Referring to the results of the pre-assessment, decide how the following set of activities would best be used during the course of the unit. Locate and arrange access to reference materials that students might use to complete the activities. Duplicate copies of the Tic-Tac-Toe Selection Board as needed. Completion of this board might be required of students who did especially well on the pre-assessment. Alternatively, the board might be offered as an option to everyone, if time allows.

Introduction

1. Explain to students that there is far more to Big Era Four than what is contained in the PowerPoint Overview Presentation. The Tic-Tac-Toe Selection Board is designed to allow them to choose specific topics and explore them in greater depth.
2. Hand out the Tic-Tac-Toe Selection Board.
3. Explain to students that during the course of the unit they will be expected to complete three activities from the board. Students may choose which activities they wish to do, but the three selections must form a “tic-tac-toe” pattern.

Use the board as an alternative assignment, outside extension, or anchor activity, or allow time during each lesson for students to work on their selected activities. If time allows, give students the opportunity to share or display their completed tasks.

Extension Activity

Student Handout

Tic-Tac-Toe

Big Era Four

<p>Imagine that you are an underwater archaeologist who has discovered the remains of a merchant ship dating from this era. Write an email to your sponsor describing what you have found. Include:</p> <ul style="list-style-type: none"> • the location of the remains • the ship's origins • where it had been going • its cargo <p>(send the email to your teacher.)</p>	<p>Look at the designs on some coins. Sketch both sides of an imaginary coin that could have been used as a medium of exchange on the Silk Road. Explain your choice of images and words.</p>	<p>Compare 2 historical maps, one showing the world circa 1000 BCE and one showing the world circa 500 CE. How many cities are shown on each map? What, if anything, do these maps tell us about the growth, density, and distribution of people during Big Era Four? Summarize your thoughts in a paragraph to be read to your classmates.</p>
<p>Research and write a brief textbook entry about one of the religions that arose during Big Era Four that was not highlighted in the Big Era Four Panorama presentation:</p> <ul style="list-style-type: none"> • Confucianism • Daoism • Jainism • Zoroastrianism 	<p>Design a slide or set of slides to be added to the Panorama presentation that describes one of the other empires of this era:</p> <ul style="list-style-type: none"> • Kush • Parthian • Kushan • Xiongnu <p>Makes sure to include both images and text.</p>	<p>In 100 CE, Rome was the largest city in the world with a population nearing 1 million. Use the internet or other reference materials to find the 3 cities closest to your location that have populations of about 1 million. What new insight does this information give you about Rome during this era?</p>
<p>Write a sentence telling how you got to school today. Next, draw a series of pictographs that tell the same information. Finally, in a sentence or more, explain the advantages of alphabetic writing systems.</p>	<p>Create a graphic organizer in which you compare two Big Era Four empires. Explain how they are alike and how they differ.</p>	<p>Population growth during Big Era Four had significant consequences for the environment. Find an article in a recent newspaper or journal that describes a situation today in which population growth has impacted the environment. Write summary of the article.</p>

Essential Vocabulary

A vocabulary list is provided here to help teachers develop pre-reading activities. In addition, the Tic-Tac-Toe selection board offers alternative activities at varying levels of difficulty.

Introduction

1. acceleration
2. agriculture
3. belief system
4. bureaucracy
5. complex
6. cultural interchange
7. era
8. innovation
9. network
10. population growth
11. standardization

Population

1. Afroeurasia
2. collective learning
3. cultivate
4. deforestation
5. epidemic
6. erosion
7. extinction
8. hybrids
9. hub
10. immunity
11. infectious disease
12. pastoral nomadism
13. population growth rate
14. population density
15. rural
16. surge
17. uninhabited
18. urban

Networks

1. caravan
2. caste system
3. commodities
4. courier
5. domestication
6. extensive
7. facilitate
8. intercontinental
9. interregional networks of exchange
10. literate
11. logographic
12. persecution
13. prosperity
14. reincarnation
15. religious toleration
16. sacred
17. terminus
18. terrain

Empires

1. commerce
2. dictator
3. diverse
4. dynasty
5. empire
6. famine
7. Golden Age
8. irrigation systems
9. rebellion
10. republic
11. reunification

This unit and the Standards in Historical Thinking

Historical Thinking Standard 1: Chronological Thinking

The student is able to (F) reconstruct patterns of historical succession and duration in which historical developments have unfolded, and apply them to explain historical continuity and change.

Historical Thinking Standard 2: Historical Comprehension

The student is able to (H) utilize visual, mathematical, and quantitative data presented in charts, tables, pie and bar graphs, flow charts, Venn diagrams, and other graphic organizers to clarify, illustrate, or elaborate upon information presented in the historical narrative.

Historical Thinking Standard 3: Historical Analysis and Interpretation

The student is able to (D) draw comparisons across eras and regions in order to define enduring issues as well as large-scale or long-term developments that transcend regional and temporal boundaries.

Historical Thinking Standard 4: Historical Research Capabilities

The student is able to (E) employ quantitative analysis in order to explore such topics as changes in family size and composition, migration patterns, wealth distribution, and changes in the economy.

Historical Thinking Standard 5: Historical Issues-Analysis and Decision-Making

The student is able to (B) marshal evidence of antecedent circumstances and current factors contributing to contemporary problems and alternative courses of action.

Resources

Instructional resources for teachers

Adams, Richard E. W. *Ancient Civilizations of the New World*. Essays in Global History. Boulder, CO: Westview Press, 1997.

Bentley, Jerry H. *Old World Encounters: Cross-Cultural Contacts and Exchanges in Pre-Modern Times*. Oxford: Oxford UP, 1993.

Bulliet, Richard. *The Camel and the Wheel*. New York: Columbia UP, 1990.

- Burstein, Stanley M. *Ancient African Civilizations: Kush and Axum*. Princeton, NJ: Markus Wiener, 1992.
- Cartledge, Paul. *The Cambridge Illustrated History of Ancient Greece*. Cambridge: Cambridge UP, 1998.
- Christian, David. *A History of Russia, Central Asia and Mongolia*. Vol. 1: *Inner Eurasia from Prehistory to the Mongol Empire*. The Blackwell History of the World. Ed. R.I. Moore. Oxford: Blackwell, 1998.
- . *Mapping Time: An Introduction to Big History*. Berkeley: University of California Press, 2004.
- Curtin, Philip D. *Cross-Cultural Trade in World History*. Cambridge: Cambridge UP.
- Ebrey, Patricia Buckley. *The Cambridge Illustrated History of China*. Cambridge: Cambridge UP, 1996.
- Elvin, Mark. *The Pattern of the Chinese Past*. Stanford, CA: Stanford UP, 1973.
- Foltz, Richard C. *Religions of the Silk Road: Overland Trade and Cultural Exchange from Antiquity to the 15th Century*. New York: St. Martin's Press, 1999.
- Hansen, Valerie. *The Open Empire: A History of China to 1600*. New York: Norton, 2000.
- Hughes, Sarah Shaver and Brady Hughes. *Women in Ancient Civilization*. Essays on Global and Comparative History. Ed. Michael Adas. Washington, DC: American Historical Association, 1998.
- Liu, Xinru. *The Silk Road: Overland Trade and Cultural Interactions in Eurasia*. Essays on Global and Comparative History. Ed. Michael Adas. Washington, DC: American Historical Association, 1998.
- Smart, Ninian, ed. *Atlas of the World's Religions*. Oxford: Oxford UP, 1999.
- Starr, Chester G. *A History of the Ancient World*. 4th ed. Oxford: Oxford UP, 1999.
- Stein, Burton. *A History of India*. The Blackwell History of the World. Ed. R.I. Moore. Oxford: Blackwell, 1998.

Walters, Jonathan S. *Finding Buddhists in Global History*. Essays on Global and Comparative History. Ed. Michael Adas. Washington, DC: American Historical Association, 1998.

Instructional resources for students

“Alexander the Great.” *Calliope: Exploring World History* 9 (Dec. 1998).

“Ashoka: India’s Philosopher King.” *Calliope: Exploring World History* 10 (Jan. 2000).

“The Babylonians.” *Calliope: Exploring World History* 11 (Nov. 2000)

“Buried by Vesuvius: Roman Art Comes Alive.” *Calliope: Exploring World History* 16 (Sept. 2005).

“The Dead Sea Scrolls.” *Calliope: Exploring World History* 12 (Dec. 2001).

“Rome’s Master Builders.” *Calliope: Exploring World History* 16 (Nov. 2005).

“The Silk Road.” *Calliope: Exploring World History* 12 (Feb. 2002).

The World in Ancient Times Series. New York: Oxford UP, 2005.

Cline, Eric H. and Jill Rubalcaba. *The Ancient Egyptian World*.

Fash, William and Mary E. Lyons. *The Ancient American World*.

Kenoyer, Jonathan Mark and Kimberley Heuston. *The Ancient South Asian World*.

Kleeman, Terry and Tracy Barrett. *The Ancient Chinese World*

Mellor, Ronald and Amanda H. Podany. *The World in Ancient Times: Primary Sources & Reference Volume*.

Podany, Amanda H. and Marni McGee. *The Ancient Near Eastern World*.

Roberts, Jennifer T. and Tracy Barrett. *The Ancient Greek World*.

Correlations to National and State Standards

National Standards for World History

Era Three: Classical Traditions, Major Religions, and Giant Empires, 1000 BCE-300CE, 5: The student understands major global trends from 1000 BCE to 300 CE.

California: History-Social Science Content Standards

Grade Six, 6.2 Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of Mesopotamia, Egypt, and Kush. 6.5 Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of India. 6.6 Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of China. 6.7 Students analyze the geographic, political, economic, religious, and social structures during the development of Rome.

New York: Social Studies Resource Guide with Core Curriculum

Unit One: Ancient World – Civilizations and Religions (4000 BC – 500 AD). B. Neolithic Revolution and early river civilizations. Compare and contrast (Mesopotamia, Egypt, the Indus Valley, and Yellow River civilizations).

Texas Essential Knowledge and Skills for Social Studies

113.33 World History Studies. (c) Knowledge and Skills. 6) History. The student understands the major developments of civilizations of sub-Saharan Africa, Mesoamerica, Andean South America, and Asia.

Virginia Standards of Learning

Era II: Classical Civilizations and Rise of Religious Traditions, 1000 B.C. to 500 A.D. WHI.6

The student will demonstrate knowledge of Ancient Rome from about 700 B.C. to 500 A.D. in terms of its impact on Western Civilization.