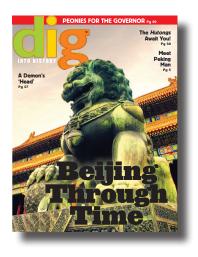
Teacher's Guide



Teacher's Guide for Dig: Beijing Through Time

Using This Guide	.2
Skills and Standards Overview	.3
Article Guides	4
Cross-Text Connections	13
Mini-Unit	14
Graphic Organizers	17
Appendix: Meeting State and National Standards	19



OVERVIEW

In this magazine, readers will learn about the remains of Beijing's past that can be explored today. Dig: Beijing Through **Time** includes

information about Peking Man as well as architectural structures created during the dynastic periods, including the Great Wall and the Forbidden City.

ESSENTIAL QUESTION:

How do items from Beijing's past inform our present?

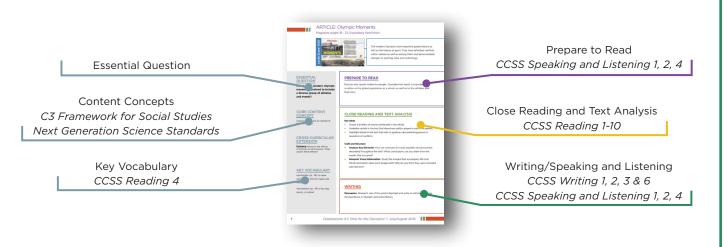


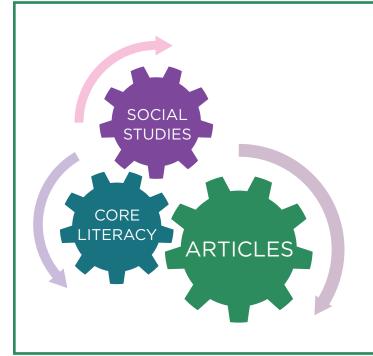
Using This Guide

We invite you to use this magazine as a flexible teaching tool, ideal for providing interdisciplinary instruction of social studies and science content as well as core literacy concepts. Find practical advice for teaching individual articles or use a mini-unit that helps your students make cross-text connections as they integrate ideas and information.

READ INDIVIDUAL ARTICLES PAGES 4 - 12

Each article in this magazine is well-suited for teaching literacy concepts and content area knowledge. For each individual article in this guide, you'll find the following:





TEACH A MINI-UNIT PAGES 14 - 16

Magazine articles can easily be grouped to make cross-text connections and comparisons. Our Mini-Unit allows students to read and discuss multiple articles and integrate ideas and information (CCSS.Reading.9). Discussing multiple articles (CCSS.Reading.9) prepares students to write texts to share and publish in a variety of ways (CCSS.Writing.2).





Skills and Standards Overview

Essential Question: How do items from Beijing's past inform our present?

	V do items from Beijing :		
MAGAZINE ARTICLES	CORE CONTENT CONCEPT	LITERACY SKILLS	CORRESPONDING CCSS ANCHOR STANDARDS
One of the Great Four Expository Nonfiction	Changes in ruling territories represent examples of historical change.	 Close Reading Analyze Text Structure Interpret Visual Information Give a Multimedia Presentation 	Reading 1, 2, 3, 5 & 7 Speaking & Listening 4 & 5
Peking Man Expository Nonfiction	The study of artifacts helps us understand life in the past.	 Close Reading Analyze Text Features Analyze Author's Point of View Research and Write an Expository Essay 	Reading 1, 2, 3, 5 & 6 Writing 2 & 7
The Grand Canal Expository Nonfiction	The needs of a culture influence the technology it creates.	Close ReadingEvaluate ToneEvaluate EvidencePresent an Opinion	Reading 1, 2, 3, 4 & 8 Speaking & Listening 1 & 4
The Great Wall Expository Nonfiction	The needs of a culture influence the technology it creates.	 Close Reading Interpret Visual Information Compare Themes Write a Letter 	Reading 1, 2, 3, 7 & 9 Writing 3
A Masterpiece in Design Expository Nonfiction	The needs of a culture influence the technology it creates.	Close ReadingEvaluate Word ChoiceAnalyze Text FeaturesWrite a Poem	Reading 1, 2, 3, 4 & 5 Writing 3
Worshiping Heaven Expository Nonfiction	The needs of a culture influence the technology it creates.	 Close Reading Determine Author's Purpose Evaluate Evidence Write a Graphic Story 	Reading 1, 2, 3, 6 & 8 Writing 3
The Forbidden City Expository Nonfiction	The needs of a culture influence the technology it creates.	 Close Reading Interpret Figurative Language Analyze Arguments Research and Write a Persuasive Essay 	Reading 1, 2, 3, 4 & 8 Writing 1
The 13 Tombs of the Ming Dynasty Expository Nonfiction	The needs of a culture influence the technology it creates.	 Close Reading Analyze Author's Point of View Interpret Visual Information Debate a Topic 	Reading 1, 2, 3, 6 & 7 Speaking & Listening 1 & 4
Let's Visit <i>Hutongs</i> Expository Nonfiction	Human environments can represent examples of historical change or continuity.	Close ReadingEvaluate Word ChoiceAnalyze Text StructureConduct an Interview	Reading 1, 2, 3, 4 & 5 Speaking & Listening 2 & 4

Comparing Texts: CCSS Reading 9

Mini-Unit: CCSS Reading 1, 2 & 3; CCSS Writing 3; CCSS Speaking & Listening 6



ARTICLE: One of the Great Four

Magazine pages 2 - 4, Expository Nonfiction



Beijing is one of four great ancient capital cities in China as well as the capital today.

ESSENTIAL QUESTION

How do items from Beijing's past inform our present?

CORE CONTENT CONCEPT

Social Studies Changes in ruling territories represent examples of historical change.

CROSS-CURRICULAR EXTENSION

Math Use the timeline on pages 2 and 3 to compute the duration of each dynasty.

KEY VOCABULARY

delta (p. 3) a piece of land shaped like a triangle that is formed when a river splits into smaller rivers before it flows into an ocean

nomad (p. 4) a member of a group of people who move from place to place instead of living in one place all the time

regime (p. 3) a particular government

PREPARE TO READ

Location, location, location. Hypothesize that they will build a new town or city hall in your community. Select a few sites and propose them as possibilities. Have students determine the merits and drawbacks for each location. Vote on the site that will work best.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- Why might it be helpful to locate a capital city near the economic center of a nation? CCSS Reading 1
- Which paragraph contains the main idea of this article? Why might the author have chosen to place the main idea in that location? CCSS Reading 2
- What role did geography play in the selection of each of China's capitals? Use details from the text to support your answer. CCSS Reading 3

Craft and Structure

- Analyze Text Structure How does the opening paragraph set up the article?
 Why do you think the author began with a specific incident in the city's history instead of using a chronological structure? CCSS Reading 5
- **Interpret Visual Information** Note the information presented in the timeline that accompanies the text. How does this add to your understanding of the dynasties mentioned in the article? *CCSS Reading 7*

SPEAKING AND LISTENING

Make an Oral Presentation Gather images of one of the Chinese capitals and make a two-minute presentation explaining why you chose each image.



ARTICLE: Peking Man

Magazine pages 5 - 7, Expository Nonfiction



Fossils of *Homo erectus pekinensis* were found in a cave near Zhoukoudian, China but were lost during World War II. Fortunately plaster casts are still available for study.

ESSENTIAL QUESTION

How do items from Beijing's past inform our present?

CORE CONTENT CONCEPT

Social Studies The study of artifacts helps us understand life in the past.

CROSS-CURRICULAR EXTENSION

Science What geological factors played a role in the preservation of Peking Man, making his discovery possible?

KEY VOCABULARY

collaborative (p. 6) involving or done by two or more people or groups working together to achieve or do something

implement (p. 7) an object used
to do work

robust (p. 6) strongly formed or built

PREPARE TO READ

Take an imaginary journey with your students to a time before humans but after dinosaurs. What was it like to live in caves with only fire and a few tools as defense against the night?

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- What do the names the people gave the hill suggest about the fossils found there? CCSS Reading 1
- Locate the main idea of each section of the text and use those main ideas to write a summary of the article. CCSS Reading 2
- How does the author introduce Peking Man and explain the importance of the discovery? Use details from the text to support your answer. CCSS Reading 3

Craft and Structure

- Analyze Text Features What is the purpose of the subtitles for each section?
 How do they help focus your reading and establish themes? CCSS Reading 5
- **Determine Author's Purpose** What is the author's attitude toward the fossils? Which specific words and phrases indicate that attitude? What does this suggest about the author's purpose for writing? *CCSS Reading 6*

WRITING

Research and Write an Essay Research Peking Man and write an essay explaining what has been learned and what scientists hope to learn from the fossils they've found. What theories are they exploring?



ARTICLE: The Grand Canal

Magazine pages 8 - 10, Expository Nonfiction



Officials in early China recognized the importance of waterways as means of moving goods and commissioned canals. Emperor Yang had these canals connected into the Grand Canal, which has been used on and off ever since.

ESSENTIAL QUESTION

How do items from Beijing's past inform our present?

CORE CONTENT CONCEPT

Social Studies The needs of a culture influence the technology it creates.

CROSS-CURRICULAR EXTENSION

Engineering What are locks and how do they work?

KEY VOCABULARY

arid (p. 10) very dry

deploy (p. 10) to organize and send out (people or things) to be used for a particular purpose

refurbish (p. 9) to repair and make improvements to (something, such as a building)

PREPARE TO READ

Show photographs of famous canals and explain why they were built. Lead the students in a discussion of the difficulties of building a canal in 486 B.C.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- Why did modern transportation systems lead to the Canal becoming less important? Use details from the text to support your answer. CCSS Reading 1
- Is there sufficient evidence in the text to indicate that the main idea of the article is that the Grand Canal is one of China's greatest achievements? CCSS Reading 2
- How does the author expand on the idea that the canal became an economic lifeline? CCSS Reading 3

Craft and Structure

- Evaluate Tone What is the tone of this article? Which specific words and phrases or stylistic choices does the author use to establish that tone? CCSS Reading 4
- Evaluate Evidence What evidence does the author present for the number of barges that traveled the canal annually? Is it likely to be accurate? Is it sufficient? CCSS Reading 8

SPEAKING AND LISTENING

Present an Opinion Do you think China can still benefit from the Grand Canal? How and why? Use details from the text and your own experience to present your opinion to the class.



ARTICLE: The Great Wall

Magazine pages 11 - 13, Expository Nonfiction



The Great Wall was built to keep out nomadic invaders from the North. The Ming dynasty extended the wall and repaired sections that hadn't been used, completing the wall we see today. However, General Wu Sangui allowed the Manchu through a gate, ending the Ming dynasty.

ESSENTIAL QUESTION

How do items from Beijing's past inform our present?

CORE CONTENT CONCEPT

Social Studies The needs of a culture influence the technology it creates.

CROSS-CURRICULAR EXTENSION

English Language Arts Read and compare versions of legends about the Great Wall of China. What can you determine about the culture at the time from the legends?

KEY VOCABULARY

confederacy (p. 12) a group of people, countries, organizations, etc., that are joined together in some activity or effort

insurmountable (p. 12) impossible to overcome

treachery (p. 13) harmful things that are done, usually secretly, to a friend, your own country, etc.

PREPARE TO READ

Tell students to imagine they have built a wall tens of feet high and thick that stretches for thousands of miles around their country. Ask them why such a wall might have been built in the first place. Then, complete the first two sections of a KWL chart about the Great Wall of China.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- How did the Great Wall influence the economic life of an area? Use details from the text to support your answer. CCSS Reading 1
- What is the main idea of the article? What is the main theme? How do they
 relate to each other? Use details from the text to support your answer. CCSS
 Reading 2
- How are the building of the wall and the need for unity in China related? Cite
 elements from the text that help explain the relationship. CCSS Reading 3

Craft and Structure

- Interpret Visual Information What information do the images accompanying the text add? Write a paragraph explaining how each illustrates the main text. CCSS Reading 7
- **Compare Themes** What elements do the sidebars share? Do they contrast the theme of the main text or add to it? How? *CCSS Reading 9*

WRITING

Write a Letter Imagine you are building the wall or defending it. Write a letter home explaining the events of your day. You may have the day be ordinary or describe an important event, but be realistic in your portrayal. Details from the text will help you.



ARTICLE: A Masterpiece in Design

Magazine pages 14 - 16, Expository Nonfiction



The Summer Palace served as home to many emperors. Despite having been destroyed and rebuilt twice, it is still a beautiful parkland with many sites to explore.

ESSENTIAL QUESTION

How do items from Beijing's past inform our present?

CORE CONTENT CONCEPT

Social Studies The needs of a culture influence the technology it creates.

CROSS-CURRICULAR EXTENSION

Art Consider the "marble boat." Then create your own functional artwork that looks like another ordinary object. The intended function is up to you.

KEY VOCABULARY

exquisite (p. 16) very beautiful or delicate

favored (p. 15) preferred over others

fixed (p. 16) placed or attached in a way that does not move easily

impressive (p. 16) deserving attention, admiration, or respect

PREPARE TO READ

Show images of artifacts owned by the Chinese emperors and of the rulers themselves. Have students imagine the sort of place these people might have lived in while using these objects.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- What can you infer about Empress Dowager Cixi's personality? Cite evidence in the text to support your inferences. CCSS Reading 1
- Make an annotated timeline of events in the article and use it to help you determine the main idea. CCSS Reading 2
- Compare the Summer Palace of today with the original. How has it changed over time? CCSS Reading 3

Craft and Structure

- Evaluate Word Choice Note the English translations of the Chinese place names. What do the names have in common? Do any stand out as different?
 Why? What do they suggest about Chinese culture? CCSS Reading 4
- Analyze Text Features Two of the subtitles have similar meanings. Why
 might the author have chosen them? How does the middle section provide a
 bridge between the past and present? CCSS Reading 5

WRITING

Write a Poem Study the illustrations and text of this article. What emotions do you feel? Capture them in a poem about the Summer Palace.



ARTICLE: Worshiping Heaven

Magazine pages 17 - 19, Expository Nonfiction



The Temple of Heaven in Beijing is one of its largest structures. Emperors used it to connect to their deities and seek favor for their people.

ESSENTIAL QUESTION

How do items from Beijing's past inform our present?

CORE CONTENT CONCEPT

Social Studies The needs of a culture influence the technology it creates.

CROSS-CURRICULAR EXTENSION

Architecture Study modern architects who consider the environment of a structure or mathematical principles in their designs. New "smart homes" and Frank Lloyd Wright are examples.

KEY VOCABULARY

balustrade (p. 18) a kind of low wall that is placed at the sides of staircases, bridges, etc., and that is made of a row of short posts topped by a long rail

reverence (p. 17) honor or respect that is felt for or shown to someone or something

PREPARE TO READ

Why do many people believe in higher beings? Explain historical reasons to your students. Be open to those who may share their own beliefs about modern worship.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- Why might commoners have been excluded from witnessing the procession?
 What does this suggest about Chinese culture at that time? CCSS Reading 1
- What evidence in the text supports the idea that the ceremonies were important to the welfare of the country? CCSS Reading 2
- What is the emperor's relationship with the deities he worships? Find evidence in the text to support your answer. CCSS Reading 3

Craft and Structure

- Determine Author's Purpose Why does the author include information about the religion and the architecture of the palace? What does this indicate about the overall purpose for writing? CCSS Reading 6
- Evaluate Evidence Compare the evidence supporting the idea that the Chinese considered odd numbers sacred with the evidence supporting the use of the number nine specifically. Are both equally supported? CCSS Reading 8

WRITING

Write a Graphic Story When is it important to show reverence? Why? Write and illustrate a story in which someone should have shown reverence but didn't. What are the consequences? How do they resolve the conflict?



ARTICLE: The Forbidden City

Magazine pages 20 - 22, Expository Nonfiction



The Forbidden City was built during the Ming dynasty as a center for government, but due to the ravages of time, the buildings you see today are mostly from the Qing dynasty, which forbade ethnic Chinese people from entering their Manchu stronghold.

ESSENTIAL QUESTION

How do items from Beijing's past inform our present?

CORE CONTENT CONCEPT

Social Studies The needs of a culture influence the technology it creates.

CROSS-CURRICULAR EXTENSION

Math and Art Study symmetry. Create a symmetrical sculpture and explain where the lines of symmetry fall within it.

KEY VOCABULARY

ethnic (p. 22) of or relating to races or large groups of people who have the same customs, religion, origin, etc.

function (p. 22) the special purpose or activity for which a thing exists or is used

terrace (p. 21) a flat area next to a building where people can sit and relax

PREPARE TO READ

Define forbidden. Discuss the things we are forbidden to do. Hypothesize about why a city might be forbidden.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- Draw a rough map of the Forbidden City and include who was allowed to enter each area. What does this suggest about the society? CCSS Reading 1
- What is the main theme of this text? How does the author present the theme?
 CCSS Reading 2
- How does the author introduce each dynasty and present its role in developing the Forbidden City? Use details from the text to support your answer. CCSS Reading 3

Craft and Structure

- Interpret Figurative Language What is implied by the phrase "time was not always kind"? CCSS Reading 4
- Analyze an Argument The author suggests that the Forbidden City differs from western palaces. How does she support this statement? Cite evidence from the text to support your answer. CCSS Reading 8

SPEAKING AND LISTENING

Research and Report Research the colors red and yellow. How were dyes and paints in these colors made? What is their significance to the Chinese people? Why might they have been used in the Forbidden City? Create a PowerPoint presentation to explain your findings.



ARTICLE: The 13 Tombs of the Ming Dynasty

Magazine pages 24 - 27, Expository Nonfiction



Thirteen tombs of Ming emperors lie in a complex outside of Beijing. Three are open to visitors today.

ESSENTIAL QUESTION

How do items from Beijing's past inform our present?

CORE CONTENT CONCEPT

Social Studies The needs of a culture influence the technology it creates.

CROSS-CURRICULAR EXTENSION

Music A variety of cultures conduct funeral processions. Listen to music associated with these processions and learn why the specific songs are used in this way.

KEY VOCABULARY

dishonorable (p. 26) not morally or socially acceptable

pavilion (p. 26) a building in a park or garden that usually has open sides and is used for parties, concerts, or other events

resemble (p. 27) to look or be like (someone or something)

PREPARE TO READ

Show pictures of famous tombs, like the pyramids in Egypt and the Tomb of the Unknown Soldier. Explain who is buried in each. Use this to lead into a discussion of why tombs are important historical sites as well as why they are culturally significant.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- Why do you think only three tombs are open to visitors? Use your prior knowledge to help you form your hypothesis. CCSS Reading 1
- What does the title suggest as the main idea of this text? How do the details support your inference? CCSS Reading 2
- Why was the selection of the burial site for each emperor important? How does
 each site relate to the life of the emperor buried within it? Use details from the
 text to support your answer. CCSS Reading 3

Craft and Structure

- **Analyze Point of View** What is the point of view of the article? Why might the author have selected this point of view? *CCSS Reading 6*
- Interpret Visual Information Study the images that accompany the article
 and write a paragraph for each explaining how it relates to the main text and
 what additional information you may have learned from it. CCSS Reading 7

SPEAKING AND LISTENING

Debate a Topic Many cultures believe that grave sites shouldn't be disturbed even for study. Read the sidebar on page 26 and use information from the sidebar, main article, and your own experience to debate this topic with a partner. Remember that you may have to defend the side you disagree with.



ARTICLE: Let's Visit Hutongs

Magazine pages 30 - 34, Expository Nonfiction



Hutongs are among the oldest neighborhoods in Beijing. They are characterized by alleyways and one-story homes with pitched roofs (*siheyuan*). In olden times, you could tell who lived in a home by features outside, but today anyone could be in the house.

ESSENTIAL QUESTION

How do items from Beijing's past inform our present?

CORE CONTENT CONCEPT

Social Studies Changes in humancreated environments represent examples of historical change.

CROSS-CURRICULAR EXTENSION

Science Research the environmental impact of automobiles and bicycles and compare the two.

KEY VOCABULARY

auspicious (p. 31) showing or suggesting that future success is likely

bustle (p. 31) to have a lot of busy activity

skew (p. 31) to change (something) so that it is not true or accurate

ventilate (p. 34) to allow fresh air to enter and move through (a room, building, etc.)

PREPARE TO READ

Study the illustrations and captions with your students. Discuss similarities and differences between the neighborhoods they live in and the *hutongs*. Have them write a journal entry about what it might be like to live there.

CLOSE READING AND TEXT ANALYSIS

Key Ideas

- What can you infer about the importance of social status in imperial times versus today? Cite evidence in the text to support your answer. CCSS Reading 1
- How does the author develop the main idea of this article? Use details from the text to support your answer. CCSS Reading 2
- Make a T-chart comparing modern and imperial life in the hutongs. (See chart on page 18.) CCSS Reading 3

Craft and Structure

- **Evaluate Word Choice** Why might the author have used Chinese terms instead of their English translations? How does this impact your understanding of the text? *CCSS Reading 4*
- Analyze Text Structure The author contrasts life in the past with modern life.
 Why is this structure effective? How would a fully chronological comparison impact the effectiveness? CCSS Reading 5

WRITING/SPEAKING AND LISTENING

Conduct an Interview Interview a classmate about whether or not he or she would like to live in a *hutong* and why. Write an article summarizing your interview.



CROSS-TEXT CONNECTIONS

SYNTHESIZE: Guide students to compare articles they read. Help students find the connections between pieces of information in multiple articles. Use prompts, such as the following examples, to have students work together to **Integrate Ideas and Information** (CCSS.Reading.9).

- Read a variety of articles and write a persuasive essay to convince your classmates which Chinese structure is the greatest.
- Refer to a variety of articles to learn about the contributions of the Ming and Qing dynasties. Write a paragraph explaining how the Qing built on the accomplishments of the Ming.
- The arrangement of a space is important in Chinese culture. Read "Worshiping Heaven," "The Forbidden City," "The 13 Tombs of the Ming Dynasty," and "Let's Visit *Hutongs*" and list the symbolism in each of the structures described.
- Many of the articles hint at the social structure during imperial times. What role did social class play? Cite evidence from the articles to support your answer.
- Locate all of the cities and buildings mentioned on a map of China or a map of the Beijing area. Consider how geographic features may have influenced their growth and development. Does evidence from the issue support your hypotheses?
- What do the fossils of Peking Man suggest about prehistoric life in the Beijing area? Reread "Peking Man" and "Let's Visit *Hutongs*." Write a paragraph noting any similarities between Peking Man and the people living in *Hutongs* today.



EXPLORATORY LEARNING - FLEXIBLE MINI-UNIT DESIGN

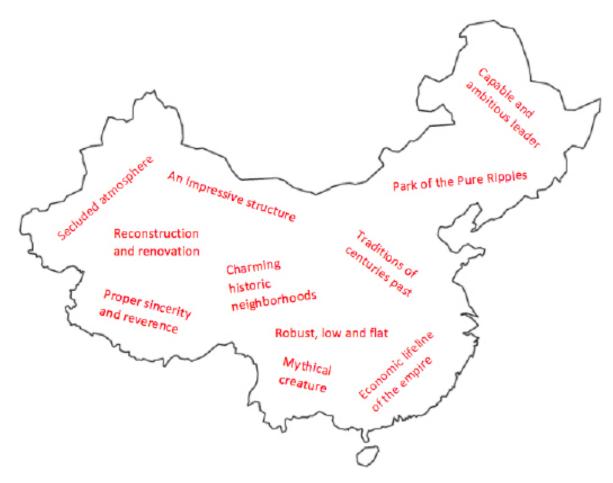
How do we connect with the world around us? In this Mini-Unit, your students will make connections to the objects and locations described in *Beijing Through Time*. They'll express their connections by writing odes to the object or place each feels most connected to.

ENGAGE

READ FOR A PURPOSE

APPLY

ENGAGE: Engage students in the topic of Beijing by asking students to consider how items from Beijing's past inform our present. Show the students the outline of China below and read the words in it. Tell them that all of the phrases were taken from the issue. Ask how the phrases make them feel and what they think the issue will be about. Consider how changing one word in a phrase changes the meaning or the feeling it evokes.



READ FOR A PURPOSE

INTRODUCE THE ACTIVITY: Ode to Beijing Explain what an ode is. Share sample odes with students and discuss the meaning of each one. Tell the students they will be writing odes to one of the items or areas focused on in the issue.

Before they begin, return to the odes you've read and discuss specific word choices the authors made. Word economy is a key to poetry, so every word has to carry weight. Make sure to consider the tasks each word accomplishes. These may include presenting an image, naming an object, helping to form a sound device, providing grammatical structure, and others. Then look again at the phrases in the Engage Activity and consider how they present ideas or images in very few words.

RETURN TO THE TEXT: Explain to students that before they can write an ode, they must gather information and form impressions about a topic from the issue. Invite the students to read all of the articles and take notes or answer the questions on the article pages. Help them decide which articles appeal to them most.

Help each student select one item from Beijing's past to write about. Have them reread the article focusing on that item and locate other references to it in the issue. While reading, students can use the Double Entry Journal to note their impressions and opinions. These ideas will form the basis for their odes.



MINI-UNIT (cont.)

APPLY: ODE TO BEIJING:

Now that students have been introduced to the concept of an ode, they are ready to begin identifying an object or place and creating their own ode about it.

STEP 1: Draft

Remind students of the purpose of an ode. Refresh their memories about the way the phrases in the Engage Activity evoked emotions. Instruct students to use information in their Double Entry Journal to create a draft of their ode. Remind students to look for powerful words to describe their powerful objects or locations as they write their rough drafts.

STEP 2: Writer's Workshop

Conduct writer's workshops in which small groups review each other's work. Have students edit for these items:

- Flow
- Clarity
- Rhythm
- Grammar
- Spelling
- Word Choice
- Punctuation

STEP 3: Create & Present

Have students write their final copy and read it aloud to the class. These can also be compiled into a book or displayed on a bulletin board.

EXTENSION ACTIVITY:

Have students illustrate their work and add travel and tourism information or other details about their subjects. These could be turned into brochures or posters.

NAME:												

DOUBLE ENTRY JOURNAL

IDEA OR IMAGE FROM TEXT	REACTION/CONNECTION

NAME:			

T-CHART

MODERN HUTONGS	IMPERIAL HUTONGS



Meeting State and National Standards: Core Instructional Concepts

The articles in this magazine provide a wealth of opportunities for meeting state and national instructional standards. The following pages contain charts listing Core Instructional Concepts for each of three curricular areas: English Language Arts, Science, and Social Studies.

USING THE STANDARDS CHARTS

ELA

Corresponding CCSS anchor standards have been listed next to each item on the Core Instructional Concepts chart. To customize the chart, add your own grade, state, or district standards in the last column. Match the concepts and standards from the chart to the activities on each page of the Teacher's Guide to complete your lesson plans.

SOCIAL STUDIES

Content Concepts in each Article Guide are based on Dimension 2 of the CS Framework for Social Studies: Applying Disciplinary Concepts and Tools. Use the last column in the accompanying chart to correlate these concepts to your state or district standards.

SCIENCE

Content Concepts in each Article Guide are drawn from the Three Dimensions of the Next Generation Science Standards. You will also find connections to these concepts within individual close-reading questions.

MATH

Content Opportunities for math activities are provided in the Cross-Curricular extensions on each Article Guide page.



CORE INSTRUCTIONAL CONCEPTS: READING, LITERATURE, AND LANGUAGE ARTS

SKILLS AND CONCEPTS	CCSS ANCHOR STANDARD	CORRESPONDING STANDARD
KEY IDEAS AND DETAILS		
Read closely to determine what a text says explicitly.	Reading 1	
Make logical inferences to determine what the text communicates implicitly.	Reading 1	
Cite specific textual evidence to support conclusions drawn from the text.	Reading 1	
Determine central ideas or themes of a text and analyze their development.	Reading 2	
Summarize key supporting details and ideas.	Reading 2	
Analyze how individuals, events, and ideas develop and interact over the course of a text.	Reading 3	
CRAFT AND STRUCTURE		
Interpret words and phrases as they are used in a text.	Reading 4	
Determine technical, connotative, and figurative meanings.	Reading 4	
Analyze how specific word choices shape meaning or tone.	Reading 4	
Analyze the structure of texts (sequence, cause/effect, compare/contrast, problem/solution)	Reading 5	
Recognize the genre , key elements, and characteristics of literary texts.	Reading 5	
Assess how point of view or purpose shapes the content and style of a text.	Reading 6	
Analyze how an author's style and tone affects meaning.	Reading 6	
INTEGRATION OF KNOWLEDGE AND IDEAS		
Integrate and evaluate content presented in diverse media and formats.	Reading 7	
Identify and evaluate the argument and claims in a text.	Reading 8	
Analyze how two or more texts address similar themes or topics.	Reading 9	
WRITING		
Write arguments to support claims, using valid reasoning and relevant and sufficient evidence.	Writing 1	
Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately.	Writing 2	
Write narratives to develop real or imagined experiences or events.	Writing 3	
Draw evidence from literary or informational texts to support analysis, reflection, and research.	Writing 9	
Conduct short as well as more sustained research projects.	Writing 10	



CORE INSTRUCTIONAL CONCEPTS: SOCIAL STUDIES

C3 INQUIRY ARC	STATE OR
DIMENSION 2: APPLYING DISCIPLINARY CONCEPTS AND TOOLS	DISTRICT
	STANDARD
CIVICS	
Analyze the origins, functions, and structure of different governments and the origins and	
purposes of laws and key constitutional provisions.	
Summarize core civic virtues and democratic principles.	
Evaluate policies intended to address social issues.	
ECONOMICS	
Evaluate the benefits and costs of individual economic choices.	
Analyze economic incentives, including those that cause people and businesses to specialize	
and trade.	
Explain the importance of resources (i.e. labor, human capital, physical capital, natural resources) in methods of economic production .	
Explain the functions of money in a market economy.	
Explain the importance of competition in a market economy.	
Apply economic concepts (i.e. interest rate, inflation, supply and demand) and theories of how	
individual and government actions affect the production of goods and services.	
Analyze economic patterns, including activity and interactions between and within nations.	
GEOGRAPHY	
Construct and use maps and other graphic representations (i.e. images, photographs, etc.) of	
different places.	
Explain cultural influences on the way people live and modify and adapt to their environments.	
Analyze places, including their physical, cultural and environmental characteristics and how	
they change over time.	
Analyze movement of people, goods, and ideas.	
Analyze regions, including how they relate to one another and the world as a whole from a	
political, economic, historical, and geographic perspective.	
HISTORY	
Interpret historical context to understand relationships among historical events or	
developments.	
Evaluate historical events and developments to identify them as examples of historical change	
and/or continuity.	
Analyze perspectives, including factors that influence why and how individuals and groups	
develop different ones.	
Evaluate historical sources, including their reliability, relevancy, utility, and limitations.	
Analyze causes and effects, both intended and unintended, of historical developments.	



CORE INSTRUCTIONAL CONCEPTS: SCIENCE

DIMENSION 1: SCIENTIFIC AND ENGINEERING PRACTICES

Dimension 1 focuses on the practice of science, and how knowledge is continually adapted based on new findings. The eight practices of the K-12 Science and Engineering Curriculum are as follows:

- Asking questions (for science) and defining problems (for engineering)
- Developing and using models
- Planning and carrying out investigations
- · Analyzing and interpreting data

- Using mathematics and computational thinking
- Constructing explanations (for science) and designing solutions (for engineering)
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

DIMENSION 2: CROSSCUTTING CONCEPTS

Dimension 2 provides an organizational schema for integrating and interrelating knowledge from different science domains. The eight NGSS Crosscutting Concepts are as follows:

- Patterns
- · Similarity and Diversity
- Cause and Effect
- Scale, Proportion, and Quantity

- Systems and System Models
- · Energy and Matter
- Structure and Function
- · Stability and Change

DIMENSION 3: DIMENSIONS AND DISCIPLINARY CORE IDEAS

Dimension 3 presents a contained set of Disciplinary Core Ideas to support deeper understanding and application of content. The following chart details Core Ideas for curriculum, instructional content, and assessments within four domains.

LIFE SCIENCE

- Structure and Function of Living Things
- Life Cycles and Stages
- Reproduction & Inherited Traits
- Animals
- Plants

PHYSICAL SCIENCE

- Forces and Interactions
- Energy
- Light
- Sound
- Electricity/ Magnetism
- Matter
- Waves
- Heat
- Chemistry
- Information Processing

EARTH SCIENCE

- Weather
- Climate
- Rocks & Soil
- Erosion and Weathering
- Landforms
- Water
- Oceans
- History of Earth
- · Plate Tectonics
- Volcanoes, Earthquakes, and Tsunamis

SPACE SYSTEMS

- Solar System
- Planets
- Moon
- Sun

