Teacher's Guide The Maya



Dear Educator,

S tep back in time to visit the accomplished Maya people who flourished for centuries then mysteriously abandoned many of their cities! While reading **KIDS DISCOVER** *The Maya*, your young historical detectives will learn about the fascinating topics at right.

This Teacher's Guide is filled with activity ideas and blackline masters to help your students enjoy and learn more from *The Maya*. Select or adapt the activities that suit your students' needs best.

Thank you for making **KIDS DISCOVER** a part of your classroom.

Sincerely,

KIDS DISCOVER

P.S. We would love to hear from you! E-mail your comments and ideas to teachers@kidsdiscover.com

Meeting the Standards

✓ World History: Era 3 Classical Traditions, Major Religions, and Giant Empires, 1000 BCE-300 CE – National Standards for History

✓ Visit <u>www.kidsdiscover.com/standards</u> to find out more about how <u>KIDS</u> <u>DISCOVER</u> meets state and national standards.

WHAT'S IN THE MAYA

2-3 Maya

PAGES

When and where did the Maya live?

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- 4-5 Early, Earlier, Earliest
 - The Archaic, Preclassic, and Classic periods in Maya history

6–7 The Inventive Maya

- Ancient astronomy, cryptic codices, and Maya math mastery
- 8–9 Maya Way of Life Daily life during the time of Maya splendor

10–11 Swimmers Captivating photograph of swimmers in a cenote, or well

- 12–13 Spanish Conquest and the Decline of the Maya
 - The Maya abandon cities in the southern lowlands and are destroyed by the Spanish

• 14–15 Uncovering the Secrets of the Maya

Unearthing the Maya civilization in the late 19th century through today

• 16–17 Maya Today

What are the modern Maya like and will they survive?

18–19 Student Activities

.

Popcorn recipes, acrostic, resources, and more

• IN THIS TEACHER'S GUIDE •

2 Prereading Activities

- **3 Get Set to Read (Anticipation Guide)**
 - **4 Discussion and Writing Questions**
- 5-6 It's in the Reading (Reading Comprehension)
 - 7 Everything Visual (Graphic Skills)
 - 8 Cross-Curricular Extensions
 - 9–12 Answer Keys to Blackline Masters



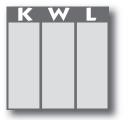
PREREADING ACTIVITIES

Before distributing KIDS DISCOVER The Maya, activate students' prior knowledge and set a purpose for reading with these activities.

Discussion

- To get students thinking about how this topic relates to their interests and lives, ask:
- ✓ Why do you think people study ancient civilizations?
- ✓ What information can we learn that could be useful in today's world?

KWL Chart



n chart paper, draw three columns and label them K ("What we Know"), W ("What we Want to know" or "What we think we Will learn"), and L ("What we Learned"). Ask: What do you already know about the Maya?

List students' responses in the K column. In the W column, list students' questions and comments about what they want to learn or what they think they will learn by reading *The Maya*. (See box below for key terms students may bring up.) At the end of the unit, have students fill in the L column listing what they learned. Finally, ask students to correct any inaccurate information written in the K column.

KEY TERMS

- 🖌 Yucatan peninsula
- 🖌 Guatemala

Chichen Itza

- Mexico
- Belize

✓ codices✓ maize

temple

archaeologist

hieroglyphs

civilization

Spanish conquistadors

Get Set to Read (Anticipation Guide)

Copy and distribute the **Get Set to Read** blackline master (page 3 of this Teacher's Guide). Explain to students that this **Anticipation Guide** will help them find out what they know and what misconceptions they have about the topic. **Get Set to Read** is a list of statements—some true, some false. Ask students to write whether they think each statement is true or false in the **Before Reading** column. Be sure to tell students that it is not a test and they will not be graded on their answers. The activity can be completed in a variety of ways for differentiated instruction:

- Have students work on their own or in small groups to complete the entire page.
- Assign pairs of students to focus on two statements and to become "experts" on these topics.
- Ask students to complete the Before Reading column on their own, and then tabulate the class's answers on the chalkboard, on an overhead transparency, or on your classroom computer.
- **Review the statements** orally with the entire class.

If you predict that students will need assistance finding the answers, complete the **Page Number** column before copying **Get Set to Read**.

Preview

Distribute *The Maya* and model how to preview it. Examine **titles**, **headings**, **words in boldface type**, **pictures**, **charts**, and **captions**. Then have students add new information to the **KWL** chart. If students will only be reading a few pages at one sitting, preview only the selected pages.

BE WORD WISE WITH POWER VOCABULARY!

Wocabulary blackline masters for every available KIDS DISCOVER title! These activities introduce students to 15 specialized and general-use vocabulary words from each KiDS DISCOVER title. Working with both types of words helps students develop vocabulary, improve comprehension, and read fluently. Follow the links from your Teacher's Toolbox CD-ROM and find your title to access these valuable resources:

- er 🔶 Vocabulary cards
 - ◆ Crossword puzzle
 - ◆ Word find
 - ◆ Matching
 - ◆ Cloze sentences
 - ◆ Dictionary list







_ Date ___

Get Set to Read

The Maya are an American people with ancient roots. What do you know about them? In Before Reading, write *true* if you think the statement is true. Write *false* if you think the statement is not true. Then read KIDS DISCOVER *The Maya*. Check back to find out if you were correct. Write the correct answer and the page number where you found it.

CHALLENGE: Rewrite each false sentence in a way that makes it true.

Before Reading		After Reading	Page Number
	1. The first people to live in North America came from Europe.		
	2. The Maya built palaces and pyramids.		
	3. Like other early Americans, the Maya kept no written records.		
	4. The Maya calculated the true length of the year.		
	5. Most ancient Maya people were farmers.		
	6. Rivers provided the water the ancient Maya in the north needed.		
	7. During the late 19th century, archaeologists unearthed and began to study ancient Mayan ruins.		
	8. Today the Guatemalan government is trying to preserve the Maya culture.		
		• • • • • • • • • • • • • • • • • • •	
		• • • • • • • • • • • • • • • • • • •	



Use the following questions as oral discussion starters or for journaling. For additional in-class discussion and writing questions, adapt the questions on the reading comprehension blackline masters on pages 5 and 6.

Pages 2–3

✓Has anyone lived in or visited Mexico or Central America? How is life there different from life here?

Pages 4–5

Lord Pacal ruled the town of Palenque when he was 12 years old. Ask:

✓What are some advantages of having a 12-year-old ruler? Disadvantages?

✓ If you were to be a ruler at age 12, what three people would you ask for help? Why would you choose these people?

Pages 4–5

Stelae showed important events in leaders' lives. Ask:

- ✓ If a stela were to be erected for an important event in your life, what would that one event be? Why?
- ✓ In your opinion, what are five important events in United States history that could be shown in a stela? Why did you choose these events?

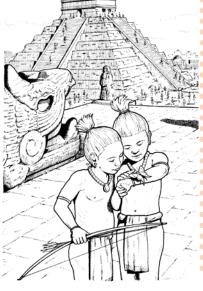
Pages 6–7

The Maya were among the first to invent a way to count to really big numbers and one of three peoples in history to discover zero. Ask:

- ✓Why do you think it was important to be able to count to really big numbers?
- Why do you think the idea of zero, or nothing, is important?

Pages 6–7

Why do you think many of the hieroglyphic carvings focused on important events in the rulers' lives rather than the typical lives of most Mayans or other aspects of Maya life?



Pages 8–9

In ancient Maya times, children lived with parents and grandparents and learned what they needed to know from the adults around them. Ask:

- What advantages and disadvantages are there to living with grandparents?
- ✓ In today's society, would you prefer to learn from your parents and grandparents or by going to school? What are the advantages and disadvantages of each situation?

Pages 10-11

✓Why do you think some cenotes were considered sacred and were used in religious ceremonies?

Pages 12–13

Throughout history, people have conquered other people and forced their values on the conquered. Ask:



- ✓ Under what circumstances, if any, do you believe one people have the right to conquer another?
- How do you think you would feel if your area were conquered and you were forced to take on a different set of values?

Pages 14–15

Why do you think people dedicate their lives to unearthing information about civilizations that have long since vanished? Does this kind of work appeal to you? Explain.

Pages 16-17

Rigoberta Menchú was awarded the Nobel Peace Prize in 1992. The Nobel Peace Prize is awarded to someone who has made a great contribution towards world peace. Ask:

Who do you think should get the next one? Explain.

All pages

As students read the issue, make a class list of Maya achievements. Ask:

✓ Which one achievement of the Maya seems most remarkable to you? Why?



Name

Date

It's in the Reading

After reading KIDS DISCOVER The Maya, choose the best answer for each question. Fill in the circle.



Find your answers on the pages shown in the book icon next to each question.

1. Who became known as the Maya?

- **O A.** the first people who came to the Americas from Asia
- **O B.** the people who settled in eastern North America
- O C. some people who settled in Mexico, Central America, and South America
- **O D**. people who crossed the Bering Strait

2. Why does the saying "Rome was not built in a day" apply to the Maya?

- **O A.** The Maya based their civilization on that of the Romans.
- **O B.** The Romans developed their civilization based on that of the Maya.
- **O** C. It took thousands of years for Maya society to develop into a great civilization.
- **O D.** It took the Maya a long time to build their temples.

3. Which of the following is a major accomplishment of the Maya?

- **O A.** They developed the concept of zero.
- **O B.** They used metal tools.
- **O C.** They used an alphabet for writing.
- **O D.** They hunted with spears.

4. How are you and your friends most like the Maya?

- **O A.** You wear feathered headdresses.
- **O B.** You enjoy chocolate-flavored drinks.
- **O C.** You do not have to go to school.
- **O D**. You use sticks to plant seeds.

5. What is a stalactite?

- **O A.** a pool of water
- **O B.** an entrance to a cave
- O C. a cone-shaped stone formation coming up from the floor of a cave
- **O D**. an icicle-shaped stone formation hanging from the roof of a cave













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It's in the Reading (continued)

6. Why did the Maya hold the scribes in high esteem?

- **O** A. The scribes painted beautiful pictures.
- **O B**. The scribes kept written records of the people and their culture.
- **O C.** The scribes were royal leaders.
- **O D.** The scribes built the Maya temples.

7. Which of the following is an opinion about the Maya?

- **O A.** The Maya carved hieroglyphs on an enormous stone.
- **O B**. The Maya were peaceful people who made great advances by living in isolation.
- **O** C. The glyphs recorded the history of the upper classes of Maya and monuments showed the leaders.
- **O D.** The Maya made folding books.

8. What is an example of the survival of the Maya culture?

- **O** A. Some Maya have houses with electricity.
- **O B**. The Maya calendar is used to mark annual ceremonial cycles.
- **O C.** Most towns have a Catholic church.
- O **D.** The Maya have abandoned their own ways of life and those of Mexico and Guatemala.

9. Do you think the Maya culture can survive in today's world? Why or why not?













Name

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Everything Visual

Date ____

Illustrations and their captions can tell a great story. They can also explain how to do something. Look at the pictures and captions for Maya Math Mastery on page 7. Use the information given and your own knowledge to answer questions about Maya math.

- **1.** How many symbols does the Maya counting system have? How many symbols does our counting system use?
- **2.** If you wanted to write the number 20 in the Maya system, how many steps would you use? What would you put on the bottom step?
- 3. What does the Maya number • stand for in our system?
- 4. Would you ever see a Maya number like this: • • •? Why or why not?
- **5.** How many steps would the Maya number 1,200 have? How would the Maya have written 1,200?
- 6. Suppose you wanted to write 8,000 in the Maya number system. How many steps would you use?
- 7. What number begins step five of the Maya number system? (Hint: multiply the first number in step 4 by 20.)



CROSS-CURRICULAR EXTENSIONS



ave students try these activities to expand their knowledge and interest in the Maya.

Social Studies, Art, Language Arts

To familiarize students with where the Maya lived, have them first locate Central America on a map or globe. Then have them locate Mexico, Guatemala, Honduras, Belize, the Yucatán peninsula, and the Gulf of Mexico. Provide students with blank maps of Central America or have them draw their own maps. Students can then fill in the names of all the countries, their capitals, mountain ranges, major rivers, and the bodies of water surrounding Central America. Each student should then select one country in Central America and research the current population, crops, important products exported, and so on.

Language Arts, Art

Have students try their hand at creating hieroglyphs of their own. To start, they should study the hieroglyphs shown in the issue on pages 6, 7, 13, 14, and 15 and in other resources. Students can then give themselves appropriate Maya-like nicknames that can be shown in picture form, such as Jeweled Skull or Jaguar. They can draw the hieroglyphic and show the class, explaining why they selected their nickname. Students should then use pictures to make a sentence and create a key showing what each hieroglyph means. Have students trade papers and keys and try to decipher the sentences.

Math

Have students use the information on page 7 to learn how the Maya wrote large numbers. After writing a few practice numbers as a class, give students a large number, such as 2,798, and ask each student to try to write it the Maya



way. Have students compare what they wrote. Then write a number using the Maya method and challenge students to determine what the number is. Encourage students to challenge each other with similar problems.

Science, Math

As explained on page 6, the Maya accurately calculated the number of days it takes Venus to travel around the sun—approximately 584 days. Have students research and make a class list of how long it takes other planets to travel around the sun. Have students make up word problems using the information from the chart, such as "How much longer does it take Venus to travel around the sun than it takes Earth?" or "Which planet takes the longest time to travel around the sun?"



Social Studies, Language Arts

Rigoberta Menchú won the Nobel Peace Prize in 1992. Have students develop questions they want to know about the Nobel Peace Prize. List the questions on the board. For example, students may want to know what the prize is for, when it was first awarded, who awards the prize, who has received the award and why, and what the actual prize looks like. Then students can research the answers. Ask students to discuss some current people who they feel deserve the award.



Name ANSWER KEY



Get Set to Read

____ Date _

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CHALLENGE: Rewrite each false sentence in a way that makes it true.

Before Reading		After Reading	Page Number
	1. The first people to live in North America came from Europe Asia.	False	p. 2
	2. The Maya built palaces and pyramids.	<u>True</u>	<u>p. 5</u>
	3. Like Unlike other early Americans, the Maya kept no written records.	False	<i>p.</i> 6
	4. The Maya calculated the true length of the year.	True	p. 7
	5. Most ancient Maya people were farmers.	True	<u>р. 9</u>
	6. Cenotes, or wells, Rivers provided the water the ancient Maya in the north needed.	False	p. 11
	7. During the late 19th century, archaeologists unearthed and began to study ancient Mayan ruins.	True	p. 14
	8. The Guatemalan government is trying to preserve destroy the Maya culture.	False	p. 16
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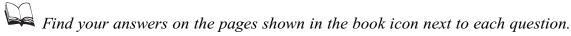


Name ANSWER KEY

Date _

It's in the Reading

After reading KIDS DISCOVER *The Maya*, choose the best answer for each question. Fill in the circle.



1. Who became known as the Maya?

- **O** A. the first people who came to the Americas from Asia
- **O B.** the people who settled in eastern North America
- C. some people who settled in Mexico, Central America, and South America (*main idea and details*)
- O **D.** people who crossed the Bering Strait

2. Why does the saying "Rome was not built in a day" apply to the Maya?

- **O A.** The Maya based their civilization on that of the Romans.
- **O B.** The Romans developed their civilization based on that of the Maya.
- C. It took thousands of years for Maya society to develop into a great civilization. *(inference)*
- **O D**. It took the Maya a long time to build their temples.

3. Which of the following is a major accomplishment of the Maya?

- A. They developed the concept of zero. (details)
- **O B.** They used metal tools.
- **O C.** They used an alphabet for writing.
- **O D.** They hunted with spears.

4. How are you and your friends most like the Maya?

- **O** A. You wear feathered headdresses.
- B. You enjoy chocolate-flavored drinks. (graphic and written context clues)
- **O C**. You do not have to go to school.
- **O D**. You use sticks to plant seeds.

5. What is a stalactite?

- O A. a pool of water
- ${\bf O}$ **B.** an entrance to a cave
- ${\bf O}$ ${\bf C}.$ a cone-shaped stone formation coming up from the floor of a cave
- D. an icicle-shaped stone formation hanging from the roof of a cave *(inference)*













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It's in the Reading (continued)

6. Why did the Maya hold the scribes in high esteem?

- **O A.** The scribes painted beautiful pictures.
- B. The scribes kept written records of the people and their culture. *(inference)*
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7. Which of the following is an opinion about the Maya?

- **O A.** The Maya carved hieroglyphs on an enormous stone.
- **B.** The Maya were peaceful people who made great advances by living in isolation. *(fact and opinion)*
- **O C.** The glyphs recorded the history of the upper classes of Maya and monuments showed the leaders.
- **O D.** The Maya made folding books.

8. What is an example of the survival of the Maya culture?

- **O** A. Some Maya have houses with electricity.
- **B.** The Maya calendar is used to mark annual ceremonial cycles. *(classification)*
- **O C.** Most towns have a Catholic church.
- **O D**. The Maya have abandoned their own ways of life and those of Mexico and Guatemala.

9. Do you think the Maya culture can survive in today's world? Why or why not?

Answers will vary, but students should provide reasons for their opinions.











Name ANSWER KEY



Everything Visual

Date _

Illustrations and their captions can tell a great story. They can also explain how to do something. Look at the pictures and captions for Maya Math Mastery on page 7. Use the information given and your own knowledge to answer questions about Maya math.

1. How many symbols does the Maya counting system have? How many symbols does our counting system use?

The Maya system uses three symbols. Our system uses ten.

2. If you wanted to write the number 20 in the Maya system, how many steps would you use? What would you put on the bottom step?

You would use two steps to write the number 20. You would place a shell on the bottom step.

3. What does the Maya number • • stand for in our system?

The Maya number stands for our number 41.

4. Would you ever see a Maya number like this: • • • • •? Why or why not?

No, the Maya did not use five dots together. Five is represented by a bar.

5. How many steps would the Maya number 1,200 have? How would the Maya have written 1,200?

The Maya number for 1,200 would have three steps. It would be written with three dots in the top step, a shell in the middle step, and a shell in the bottom step:



6. Suppose you wanted to write 8,000 in the Maya number system. How many steps would you use?

To write 8,000 in the Maya system, you would use four steps.

7. What number begins step five of the Maya number system? (Hint: multiply the first number in step 4 by 20.)

Step five begins with the number 160,000.