

Teacher's Guide: Writings of the Ancient Maya

Recommended Grade Level: 5-8

(also applicable to grades 9-12 for students requiring significant support in learning)

Suggested Time: About 50-60 minutes spread over one or more class periods, plus additional time to complete a writing assignment

Goals

Following are the big ideas that students should take away after completing this lesson:

- The ancient Maya created a complex system of writing to guide their daily lives and record their history
- The Spanish conquered the ancient Mayan civilization and destroyed most of the writings of the Maya
- Archeologists have discovered artifacts with Mayan writing that have taught them about this ancient civilization

Vocabulary

(See definitions on page 6.)

- almanac
- ancient
- artifact
- astronomy
- civilization
- decipher
- ruins

Key Literacy Strategies

Following are the primary literacy strategies students will use to complete this activity:

- Constructing summaries (screen 4, writing assignment 1)
- Determining important information (screens 6, 8, and 10, writing assignment 2)
- Making inferences (screen 6)
- Comparing and contrasting ideas (screen 7)

Note: In addition to using the key literacy strategies listed above, students will use each of the strategies below to complete this lesson:

- Monitoring comprehension
- Synthesizing
- Making predictions
- Developing vocabulary
- Connecting prior knowledge to new learning
- Developing a topic in writing
- Identifying and using text features (photographs, captions, diagrams, and/or maps)

Overview

Writings of the Ancient Maya is a student-directed learning experience. However, while students are expected to work through the lesson on their own, teachers should be available to keep the lesson on track, organize groupings, facilitate discussions, answer questions, and ensure that students meet all learning goals.

The following is a summary of the lesson screens:

- Screen 1: Students learn that the ancient Maya in Central American once built amazing structures, and used math and astronomy to guide their lives.
- Screen 2: Students read that the ancient Mayan civilization left behind objects that had pictures and designs on them; this was their system of writing. They learn that in this lesson they will explore what we can learn about the Maya from these writings.
- Screen 3: Students learn what the goals are for the lesson, which strategies they will be using to complete the lesson, and the important vocabulary words they will use during the lesson.
- Screen 4: Students watch a video about what happened to the Mayan writings when the Spanish arrived in Central America. They then write about what we have learned from the Mayan writings that remain.
- Screen 5: Students read that only four of the Mayan codices remain, but that archaeologists have been able to study other artifacts with Mayan writings on them.
- Screen 6: Students read that archaeologists now can understand much of the ancient Mayan writings, which have shown that the Maya were experts in math and astronomy. They write down one to two sentences to describe what the Maya chose to write about, and why this was important to them.
- Screen 7: Students read a passage about the Mayan writing system and the kinds of information the ancient Maya recorded in these writings. They then write three to four sentences comparing the Mayan and English writing systems.
- Screen 8: Students answer three multiple-choice questions to show comprehension of what they've learned so far.
- Screen 9: Students complete an interactive vocabulary activity by dragging the correct word into an incomplete sentence. They then choose two words from the vocabulary list and write a new sentence for each word. These tasks demonstrate their understanding of the meanings of the words.
- Screen 10: Students use an interactive activity to highlight sections of a reading that answers two key questions about the writings of the ancient Maya. Then they write down one to three sentences to describe one of the reasons why people have wanted to read the ancient Mayan writings.
- Final
Assignment: Students select and complete a writing assignment about the lesson topic.

Before the Lesson

- ❑ Go through each screen of the lesson, including all the interactive activities, so that you can experience ahead of time what students will be doing. As you go through each screen, jot down your own expectations for students' responses.
- ❑ Determine if students will be working individually or in pairs on the lesson. Some students may be able to work independently with little or no support. Students who are less familiar with the subject area or who struggle with literacy skills may benefit from working with another student. An effective way to do this is to pair a stronger student with a less able reader. You can also have students work individually on certain tasks and in pairs on others, depending on their experience and needs. If students will be working in pairs on any portion of the lesson, let them know if they will be expected to type in their notes individually or together.
- ❑ Provide instruction on key vocabulary (vocabulary words are defined in the lesson on screen 3, and on page 6 of this guide).
- ❑ Determine what students already know about the ancient Maya and their system of writing. You may want to use specific questions to start the discussion, such as: Why is it important to study ancient civilizations? What do you know about ancient systems of writing? What do you think of when you hear the words "the ancient Maya"? Where did the Maya live, and when? What calendar are the Maya famous for? Record their ideas on a chart, highlighting the words that may come up in the lesson. This will give you a sense of the background knowledge and possible misconceptions that students have before beginning this lesson. If time allows, return to the chart after students have completed the lesson to add new learning and correct misconceptions. Note: You may want to record their new learning in a different-colored ink so they can see how much they've learned.
- ❑ Arrange computers with Internet access so students can work individually or in pairs.
- ❑ Before students begin, suggest a timeline for completing the lesson, mention the different types of media they will encounter, and let them know how you expect them to submit their work. You may want to provide an outline of this information on a chart, chalkboard, or whiteboard, or as a handout.

Lesson Assessments

The following are descriptions of the lesson features that will be part of the packet of materials that students will submit. Students will use the packet for reference when writing their final assignment. It also serves as a formative assessment tool to monitor students' work as they're progressing through the lesson.

- **Notes** - Students take notes on screens 4, 6, 7, and 10. If time allows, review their notes before students begin their writing assignment.
- **Multiple-choice questions** - Students complete the three multiple-choice questions on screen 8. Walk around to make sure students answer all three questions before they continue. If students click to go to the next screen before they finish, their work will not be saved.

- **Match It!** - Students complete an interactive vocabulary activity on screen 9. They begin by dragging the vocabulary terms into the correct sentences. After they finish and save their work, they will be able to check their answers against an answer key. When they are done, they will be asked to choose two vocabulary words and write a new sentence for each word. Sentences should demonstrate a clear understanding of the meaning of each word. An inappropriate response would be “The ancient Maya had artifacts.” An appropriate response would be “Writing has been found on ancient Mayan artifacts.”
- **Highlight It!** - Students complete an interactive vocabulary activity on screen 9. They will read a selection and then highlight specific information that answers two questions about the reading. Students will not be able to check their answers online, so you will need to provide them with the correct answers when they are finished with the lesson. You can choose to review the answers as a class or return the corrected packet of materials to students before they begin the final assignment.

Following are some of the statements students may highlight to answer each question:

Question 1: Why have people wanted to decipher the Mayan writings?

Highlighted information to answer question 1 should include that people have wanted to learn about the ancient Mayan civilizations through the writings they left behind. It should also include that Mayan people today, who are descendants of the ancient civilization, are learning about their own history and culture by learning to read and speak the ancient language.

Question 2: What have we learned about the Mayan way of writing?

Highlighted information to answer question 2 should include the discovery that some of the Mayan symbols stood for numbers, which showed that the Maya used math to create accurate calendars and almanacs. Answers should also include the discovery that some symbols stood for entire words and others stood for sounds (like our letters). Finally, answers should include David Stuart’s discovery that the Maya often used different symbols to create the same sound.

- **Final Assignment** - Students complete one final writing assignment. You can choose to let students make their own selection, or assign one according to your goals for the lesson. Use the rubric on page 7 to assess the writing assignments.

Lesson Aids and Extensions

Use the following suggestions to help students if they are stuck on a particular screen, to prepare students for completing their writing assignments, or as follow-up discussions to reinforce learning.

- **Watching Videos** - Encourage students to watch the videos more than once. After the initial viewing, provide students with a specific content focus to frame their next viewing(s) of the video. This will help them draw connections between the main topic and the information that the videos have to offer.

- **Participating in Discussions** - Organize class discussions or encourage students to talk about their questions in pairs. You may want to use the following discussion starters:
 - o Why did the Spanish priests burn the Mayan writings?
 - o What kinds of things did the Maya record in their books?
 - o Why might these things be important to them?
 - o How was Mayan writing different from our own writing in English?
- **Reading the PDF Text** - Before students read the PDF text on screen 10, ask them to review what archaeologists have learned about the ancient Mayan writings. Ask them to also consider who besides the archaeologists might want to learn more about this ancient civilization. This will set students up for reading more about the structure of the Mayan writings and the descendants who have not been able to access this information until now.
- **Sharing Student Work** - It may be motivational, and a further learning opportunity, for students to post their final essays so that their classmates, peers, and/or parents can see them. This may also provide an opportunity for students to comment on and discuss each other's essays.

If you do not already have access to an online writing community, Teaching Matters™ provides TeXT, free classroom publishing tools that allow teachers and students to create and publish their own online eZine. More information and a free signup are available at Teaching Matters: TeXT (<http://text.teachingmatters.org>).

- **Reflection and Self-Assessment** - After students have turned in their writing assignments, you can choose to have them assess their learning. Bring students together as a whole class or in small groups to discuss the questions below. You may want to return to the chart of their ideas developed before the lesson and record their new learning. You may also have students respond individually to the questions, and then convene the class to discuss the chart.
 - o What did you learn?
 - o What was surprising?
 - o What questions do you still have?
 - o What was the easiest for you to understand and do?
 - o What was the most difficult?

Vocabulary

almanac

A book that describes natural events (like weather or the movement of stars) that people expect to happen in the coming year. The information in an almanac is usually based on what has happened in past years.

ancient

Belonging to the distant past; this word usually refers to people, objects, or events from hundreds of years ago.

artifact

An object made by humans; this word is often used to describe objects made by people long ago.

astronomy

The study of objects in outer space, such as stars and other planets. Astronomers are scientists who study these space objects.

civilization

A large society of people who live at a particular time and place and who have developed ways to organize and manage their lives.

decipher

To change a code or unknown language into one that you can understand.

ruins

The remains of buildings and other structures that have fallen apart because someone has destroyed them or because they have not been cared for in a very long time.

Final Assignment Rubric Writings of the Ancient Maya

1. Write a description of the ancient Mayan writing system. Be sure to include the following:
 - a. How did the Maya use symbols and pictures to make words?
 - b. What kinds of artifacts have been found with Mayan writing on them?
 - c. What did the Maya write about?

2. What have we learned about the accomplishments of the ancient Mayan civilization from their writings?

	4	3	2	1
	Provides a clear and accurate response to the question. Ideas are elaborated, with three or more relevant supporting details from the reading passage, video, and other materials in the lesson.	Provides an adequate response to the question. Topic and ideas are generally well organized, with two relevant supporting details from the reading passage, video, and other materials in the lesson.	Provides a generally accurate response, with one supporting detail from the reading passage, video, and other materials in the lesson.	Provides an inaccurate response to the question or fails to address the question. May include misinterpretations. Understanding of the topic is not apparent.
	Uses at least three vocabulary words (or a form of the vocabulary words) from the lesson, and uses them all correctly.	Uses two vocabulary words (or a form of the vocabulary words) from the lesson, and uses them both correctly.	Uses one vocabulary word (or a form of the vocabulary word) from the lesson, and uses it correctly.	Does not use any vocabulary words, or uses vocabulary words incorrectly.

Scoring the Rubric

Here are two suggestions for scoring the final assignment rubric. Select the option that best meets your needs or develop your own grading system.

Option 1: This option provides one score for each submitted assignment.

Assign a score of 4 or below for the written response (first row of the rubric) and a score of 4 or below for the use of vocabulary (second row of the rubric), for a total maximum score of 8. The interpretation of scores is as follows:

Score	Grade	Narrative Interpretation
7-8	A	Excellent
5-6	B	Good
4	C	Adequate (Fair)
3 or below	D	Minimal

Option 2: This option provides two scores for each submitted assignment: one for written content and one for the use of key vocabulary. An advantage of separate scores is that you can weight students' comprehension and composition differently than you do their knowledge of vocabulary. It can also help you identify specific needs for future instruction.

Assign a score of 4 or below for the written response (first row of the rubric) and a score of 4 or below for the use of vocabulary (second row of the rubric) and then score them separately. The interpretation of scores is as follows:

Score	Grade	Narrative Interpretation
4	A	Excellent
3	B	Good
2	C	Adequate (Fair)
1	D	Minimal

The final grade may look like this: A/B (A for content and B for vocabulary use).