



The Legend of the Lost Emerald

Educator Guide

Game Summary

In *The Legend of the Lost Emerald*, learners in grades 4-6 will use the same tools, practices, and skills that maritime archaeologists use to locate and dive for shipwrecks on the Great Lakes and uncover the real treasure—the stories inspired by actual shipwrecks and Great Lakes history.

Average time to play: 2 class periods of 35-40 minutes.

Recommended browser: Google Chrome

Language options: English, Spanish (To play in Spanish, click the "Options" button on the game home screen.)

Learning Goals

By playing the game, learners will:

1. INQUIRE: Engage in critical thinking and historical inquiry to solve mysteries of shipwrecks in the Great Lakes.
2. INVESTIGATE: Gather historical evidence from multiple sources by applying the language, practices, and tools of maritime archaeologists.
3. INFER: Practice using important reading, listening and language skills with primary and secondary source materials to support an evidence-based conclusion.

Academic Standards Supported

[Wisconsin Standards for Social Studies](#): SS.Inq2, SS.Inq3, SS.Geog1, SS.Hist1

[Wisconsin Standards for English Language Arts](#): R.4.4, RF.4.4a, RF.4.4c

[Wisconsin Standards for Information and Technology Literacy](#): ITL.KC1.c.2.i

Other related standards: [Disciplinary Literacy Standards](#) [Great Lakes Literacy Principles](#)

Guiding Questions & Key Terms

Below are some guiding questions that you can ask learners. You may wish to emphasize the key terms (in **bold**) that can be found in the game. The 'before playing' questions include sample responses, but the 'while playing' and 'after playing' questions do not, as some are open-ended or depend on what a player is doing in the game.

Use these questions with learners **BEFORE** playing the game.

QUESTION	SAMPLE RESPONSES
What is archaeology?	Archaeology is the study of how humans lived in the past—using places and artifacts to piece together the puzzle.
What does maritime mean?	Maritime isn't a time you'll find on a clock—it means having to do with the sea or sailing!
Who are maritime archaeologists?	Like archeologists, maritime archaeologists are people who study how people lived in the past, with a special focus on waterways, bodies of water, and water travel.
Who are archivists?	Archivists are people who organize, store, study, and share records and artifacts from the past.
What is sonar?	A sonar system bounces sound waves off of objects to "see" what is in the water! It can be used to make maps and charts of waterways and bodies of water, spot things that might get in the way of water travel, and help find things that have sunk below the surface—like shipwrecks!
How do archaeologists and archivists investigate a mystery?	They investigate a mystery by: <ul style="list-style-type: none"> ● Asking questions. ● Searching for and collecting information and clues in primary and secondary sources. <ul style="list-style-type: none"> ○ Examining and evaluating evidence from primary sources (artifacts, ship logs, eyewitness accounts). ○ Examining and evaluating evidence from secondary sources (experts, books, online documents). ● Learning about the time period (contextualize). ● Proving (by corroborating) that what they are saying is true. ● Presenting what they learned.
What are latitude and longitude?	Latitude is a measurement that tells us how far north or south a location is, and is measured in degrees. Longitude is a measurement that tells us how far east or west a location is, and is measured in degrees.
What is cargo?	Cargo is the merchandise or goods that a ship carries.

Use these questions with learners WHILE playing the game.

1. Is that artifact a primary or secondary source? How do you know?
2. I see you found a piece of evidence. Tell me how you can use it.
3. Explain how this new evidence fits with what you already know.
4. What new questions do you have after hearing from that character? Do you need more evidence to confirm what they said?
5. Do you have a prediction about the shipwreck after collecting that information?
6. Summarize with supporting evidence how you solved the mystery of that wreck.

Use these questions with learners AFTER playing the game.

1. How would you describe Jules' job as a maritime archaeologist?
2. In this game, some of the initial ideas about where and how shipwrecks happened turned out not to be true. What did Jules need to be sure of what really happened? Where or how did she find that?
3. What role did ships play in the History of the Great Lakes region?
4. If you could do your own historical investigation...
 - What would it be about?
 - How would you set up your evidence board?
 - What types of artifacts would you be looking for?

Go Deeper: Real Shipwrecks That Inspired the Game

There are **over 6,000** known shipwrecks in the Great Lakes! While the ones in the game are historical fiction, you can dive into deeper learning by investigating the real shipwrecks that inspired the game and researching other wrecks and their stories (see the next page for a chart to help you get started).

In search of even more information? Visit www.wisconsinshipwrecks.org to do more research and explore more media on www.pbswisconsin.org/shipwrecks!

SHIP NAME & TYPE IN GAME	INSPIRATION SHIPS
<p>Level 1:</p> <p><i>The Loretta</i> Canaller</p>	<p><i>The LaSalle</i> Powered-parachute pilot, Suzze Johnson, discovered the wreckage of the LaSalle from the air in 2015 following a period of sand movement on Rawley Point.</p> <p><i>The Major Anderson</i> Due to the Great Chicago Fire and Peshtigo Fire, dense smoke hung over Lake Michigan. Paired with heavy gale conditions at 2AM on October 7, 1871, the Major Anderson ran ashore near Two Rivers.</p>
<p>Level 2:</p> <p><i>SS Madison</i> Freighter</p>	<p><i>The Lakeland</i> Resting in 205 feet of water near Sturgeon Bay, broken nearly in half, this wreck site still has at least twenty-one Nash and Kissel vehicles.</p> <p><i>SS Senator</i> On the morning of October 31, 1929, the Senator was rammed by another ship in a dense fog near Port Washington. The ship was transporting 268 Nash automobiles from Milwaukee to Detroit.</p>
<p>Level 3:</p> <p><i>PS Paradise</i></p> <p>Wooden side-paddle steamer</p>	<p><i>The Phoenix</i> On November 11, 1847 the Phoenix was near Sheboygan when members of the crew discovered a small fire in the engine room. Soon it was out of control and the 1st mate gave the order to abandon the ship .</p> <p><i>The Niagara</i> The Niagara was a side-wheeled steamboat and was considered one of the best steamers of her day. The ship caught fire and sank in 1856.</p>
<p>Level 4:</p> <p><i>SS Emerald</i> Freighter</p>	<p><i>SS Carl D. Bradley</i> The SS Carl D. Bradley was a Great Lakes freighter that sank in a storm on November 18, 1958. The cause was likely due to a structural failure from the brittle steel used in her construction.</p>