

## JOURNEY TO THE BOTTOMLESS PIT)

A Classroom Guide to

### JOURNEY TO THE BOTTOMLESS PIT The Story of Stephen Bishop & Mammoth Cave

By Elizabeth Mitchell  
With illustrations by Kelynn Alder

You and your 4th to 8th grade students are about to climb down into one of the United States' most-visited caves: Mammoth Cave in Kentucky. It is 1838, and your tour guide is seventeen-year-old Stephen Bishop, an African American slave who has learned about this amazing place step-by-step through his own explorations of the steep, dark, sometimes terrifying, always fascinating world.

Journey to the Bottomless Pit, based on the narratives of those who toured the cave with Stephen Bishop, not only offers an exciting reading experience and a close-up look at the life of a genuine American explorer, but also supports curriculum in history, science, social studies, language arts, and more while it encourages young readers to discover their own passions and pursue them.

This classroom guide will help you take advantage of the educational connections in the book through comprehension and retention questions, discussions, and numerous activities.

Put on your climbing gear and start the adventure.

#### Before You Begin

Take a short virtual tour with your class of Mammoth Cave National Park. Develop a list of questions your students have about the cave and then introduce Journey to the Bottomless Pit and explain that the book will introduce them to one of the earliest and most important explorers of Mammoth Cave.

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Vocabulary  
Language Arts: Vocabulary

As they read, your students will come across words they are not familiar with and terms that are

important to understanding Journey to the Bottomless Pit. Encourage them to keep a running list of those words. For each word they should write a definition in their own words that shows their comprehension of the word. For the terms and other key references, they should write brief notes of what they mean and why they are important.

Here are a few words to help get your students' lists started:

Cascade (verb)

Crevice

Oblige

Blockade

Hemp

Rotunda

Stalactite

Stalagmite

Questions of Fact

Language Arts: Reading Comprehension and Retention

What leadership qualities did Stephen Bishop have? How did he use those qualities in his career as a cave guide?

When Stephen and Archibald Miller first went into the cave together, Stephen asked how the stalactites were formed. "Miller probably didn't know the answer to Stephen's question, and he was embarrassed about it... [Finally] Miller said 'I believe they were formed by water dripping down from the cave roof ... I just don't know why they're made out of rock instead of ice.'" (Page 21) After reading Journey to the Bottomless Pit, your students know better. What is the correct answer to Stephen's question?

Stephen was so curious about the secrets Mammoth Cave might have, that one Sunday – his only day off – he hiked down to explore on his own.

He had been warned not to go down to the Labyrinth. What was it? Why was it dangerous?

What did Stephen use to mark his route so he would be able to find his way out?

What did Stephen discover on his solitary journey?

What name did H.C. Stevenson and Stephen Bishop give to the river they found in the cave?

Why? Why did Stephen feel angry with the Louisville Journal's coverage of his and Stevenson's explorations?

Who purchased Mammoth Cave from Franklin Gorin? What changes did he make?

Why did the new owner think the cave could function as a hospital for patients with

tuberculosis? Was he correct?

Throughout Journey to the Bottomless Pit Stephen Bishop is a slave. After his success as a guide in Mammoth Cave and the fame that came with it, he began thinking how he might become free. Times were slowly changing, and some slaves were making their way North where slaves could find freedom. How did Stephen finally become a free man? What did he and Charlotte do when they were emancipated?

### Discussion Questions

Language Arts: Reading, Critical Thinking; Cooperative Learning; Ethics

Stephen thought to himself about caving, "If you [Archibald Miller] learned this, then I can too." What does that say about what he thought about himself? What does that say about what he thought of Archibald Miller?

What were the factors that motivated Stephen Bishop to be a good guide? What did he know about the consequences if he failed in his job?

Stephen never got credit for any of the discoveries he made. Talk about how he felt about this. Would you have expected this? Have your students write about then discuss times when they or someone they knew was denied credit for something done?

Fortunately for Stephen, Kentucky never enacted an anti-literacy law. How might things have been different for him if they did? Why did many of the Southern states have these laws?

What if your students could talk to Stephen Bishop? What would they ask him? Make a list of the questions on the board.

### Activities

Science: Earth Science; Language Arts: Writing

Every time a new room or passageway was discovered in Mammoth Cave it was given a name that often represented a specific impression of the nature of the room. Based on the information in the book students should keep a chart of the rooms and passageways in Mammoth Cave and the significance of their names. A sample chart is below:

Rooms and Passageways of Mammoth Cave

Room or Passageway	Significance of the Name	Who Discovered it
Rotunda	It's shaped like a big dome	unknown

Science: Technology; Language Arts: Research, Speaking and Listening; Cooperative Learning

Stephen explored miles of Mammoth Cave and crossed the famous Bottomless Pit with hardly any tools except for a candle, a lantern and a rope. Today's cave explorers have dozens of additional hi-tech items to help them stay safe in the dark. Students should research some of the tools that they take with them and how they are used. Have them debate which contemporary tools they believe are the most valuable to cavers.

Language Arts: Creative Writing, Critical Thinking, Speaking and Listening; Cooperative Learning

Your students know how to express themselves in 140 characters on Twitter, but can they do the same in just six words? An activity from the National Writing Project demands just that: the six-word memoir. The six-word memoir teaches critical thinking and requires your students to choose their words precisely. Format of the memoirs is flexible: the words can make up a sentence or simply be a group of words that together express a thought or idea. To get some practice, your students should write six-words memoirs for themselves. It could be about what they are thinking now or what their hopes and aspirations are. After reading *Journey to the Bottomless Pit*, your students should compose a six-word memoir of Stephen Bishop. Then they should also write a six-word memoir for Mammoth Cave. Memoirs should be shared with classmates

Social Studies: History; Language Arts: Writing, Speaking and Listening; Cooperative Learning

At the back of *Journey to the Bottomless Pit* there is a timeline chronicling Stephen Bishop's life and times. But what else was going on during his lifetime? Divide your students into groups to cover specific dates on Stephen Bishop's timeline. Each group should research what else was occurring in our country and around the world for five years before their date and five years after. For example, in 1821, Stephen Bishop's birth year, Missouri was admitted to the Union as the 24th state, in 1839 in England *Oliver Twist* by Charles Dickens was published in book form, in 1842 in Germany, Felix Mendelsohn composed the "Wedding March," and in the year Stephen Bishop died, 1857, the Supreme Court ruled against *Dred Scott*. Create a master timeline for all the events your students chose. Each group should report on which event they think was the most important one they found.

Science; Following Directions; Cooperative Learning

Stalactite and Stalagmite Activity

You and your students can simulate the growth of a stalactite and a stalagmite in your classroom. (This can be done as a demonstration by you or by teams of students) Students

should record the growth rate of the stalactites. Since growth rate can be slow, they should decide which measuring system to use.

#### Materials needed

Two glass jars

A saucer

Woolen thread or cotton cord about 48 inches or 120 centimeters long

Two paper clips or safety pins

Saucepan

Mixing spoon

Baking soda, Epsom salts, or table salt

Water

#### Instructions:

Fill the sauce pan with hot tap water. (For better results heat water on a hot plate but don't let it boil.)

Pour the crystals you are using into the hot water and stir until you get a saturated solution. (That is when no more crystals will dissolve in the water.)

Pour equal amounts of the solution into the glass jars.

Set the jars about six or eight inches apart and place the saucer between them.

Fold the thread or cord so that it is about 24 inches or 60 centimeters long. Twist the thread around so it forms a sort of braid. Attach the clip or pins to its ends to act as weights to hold the cord down in the jars.

Soak the thread in the solution then place the ends into the jars letting the middle of the braided thread hang down above the saucer.

Because of capillary action, the solution will travel slowly along the thread from the jars until it reaches the middle.

As the solution drips down, small amounts of crystals will be deposited on the fibers of the thread. The slower the solution drips, the better it is so you can adjust the drip by moving the jars closer or further apart changing how much dip there is in the thread. Over time the crystals will accumulate and simulate the growth of a stalactite in a cave.

The solution that drips onto the saucer will bring dissolved crystals with it. When the solution evaporates, crystals will be left behind and simulate the growth of a stalagmite.

Which ingredient makes the best stalactite? Try the activity with each of the ingredients listed above to decide.

#### Additional Resources

For more information about Stephen Bishop and Mammoth Cave, visit:

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