Grade Level: Intermediate

# **Lost Spring Game**

# Overview

Students access previous knowledge about the Santa Fe Trail, analyze a primary source to determine the importance of water to those traveling on the trail, and use an xy grid to reinforce its importance.

# **Standards**

#### Mathematics Standard (2017)

Domain – Geometry

Cluster Heading – Classify two-dimensional figures into categories based on their properties. Tag - 5.G.2. - Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane and interpret coordinate values of points in the context of the situation.

### KHGSS Standard (2020)

Standard 5 Relationships among people, places, ideas, and environments are dynamic. Benchmark 5.2 The student will analyze the context and draw conclusions about dynamic relationships.

# **Objectives**

#### Content

1. The student will explain the importance of water along the Santa Fe Trail.

#### Skills

- 1. The student will analyze a primary source.
- 2. Students will plot and locate xy coordinates on a grid.

# **Essential Questions**

Why was it important to know the location of water sources along the Santa Fe Trail?

#### **Assessments**

- 1. Class discussion
- 2. Completion of xy grid activity



# **Activities**

**Previous Knowledge:** Students need to be familiar with the function of the Santa Fe Trail as a commercial trail reaching from the Kansas-Missouri border to Santa Fe, the general terrain of the trail, and the types of transportation used on the trail.

**Materials Needed:** A current map of Kansas that includes the location of Council Grove and contains a key for distance, two copies of the game board, and two small items to use as markers.

- 1. Introduce the Santa Fe Trail topic. Access students' previous knowledge of the trail
  - a. It was a commercial trail that entrepreneurs used to move goods both east and west to make a profit on their investment.
  - b.The reality of 19th century life in terms of transportation, travel speed, and ability to acquire the necessities of life while traveling.
- 2. Students examine the 19th century guidebook provided at the end of this lesson to gain context for the need for drinking water along the Santa Fe Trail. Provide time for students to review the guidebook information and then initiate a class discussion to answer the following questions.
  - a. What is the name of the guidebook this excerpt was taken from? Who wrote it? [Commerce of the Prairies, Josiah Gregg]
  - b. What years did Josiah Greag document in this book? [1831-1839]
  - c. How many times did he travel along the Santa Fe Trail in these years? [6 times]
  - d. What is he writing about in this excerpt? ["the most notable camping sites" on the Santa Fe Trail]
  - e. Where did his record of campsites begin? [Independence (Missouri)] Where did it end? [Santa Fe (Mexico)] How many miles was it from beginning to end? [770]
  - f. How many camping sites does he record using along the trail? [39 including Santa Fe]
  - g. How many of these camping sites are named for some type of water source? [NOTE: Arkansas is a river, r means river, Cr. means creek, spr means spring, Rio is river, ford is a shallow place to cross a stream or river, and the Narrows is a ridge between the Marais des Cygnes River and the Wakarusa River running roughly along today's Hwy 56 from Baldwin City to Hwy 75]
  - h. From this list what might one assume about how important access to water was to those traveling on the Santa Fe Trail? [Very important. The majority of campsites were associated with a water source.]
  - i. Why would water be so important? [Water is necessary for life. There were no 21st century amenities such as bottled water or rest areas with faucets and drinking fountains. Being both heavy and a liquid water is difficult to transport for any distance which meant travelers needed to know where to find it. (Water weighs 8 pounds per gallon.)]
- 3. Introduce the Lost Spring location on the Santa Fe Trail.
  - a. As a class examine the guidebook and find the Lost Spring camp site among those listed. Using the guidebook, locate its distance from Council Grove and find the general location of Lost Spring on a current Kansas map.
  - b. On the current Kansas map note Lost Spring's distance from the Rocky Mountains. Explain that water originating in the Rocky Mountains followed underground fault lines to eventually appear at the surface in Marion County, Kansas, the county where Lost Spring is located.
  - c. Explain the confusion over the location of Lost Spring. The spring thought to be the Lost Spring camp site listed in the guidebook emerged at the base of a small rocky cliff. Level ground near the spring provided a good place to camp. A short distance away a stage station was built named Lost Spring Station. Mail and passenger coaches stopped there, limited meals and lodging were available, and draft animals could be rested. The station was located on a shortcut along the Santa Fe Trail. Horses and stagecoaches could navigate the rougher terrain of the shortcut route but not the heavier wagons filled with trade goods. The latter continued to use the original Lost Spring campsite. Since both were named Lost Spring, confusion arose over the location of the true Lost Spring location.
- 4. Play the Lost Spring game. Players will take turns trying to find the "real lost spring" on a gridded playing board. Goal: The goal of this game is to find the true Lost Spring campground. It is played like the game of Battleship.

Materials: 2 copies of the game board, 2 markers such as small beans or stones.

Players: This is a game for 2 people.

Directions: Use the gridded game board provided.

- 1. Place your game board where it cannot be seen by the other player.
- 2. Player 1 places a marker representing Lost Spring on his/her gamer board without telling Player 2 where it is located.
- 3. Player 2 tries to guess the location of Lost Spring by naming two ordered pairs (ex: 2,4). Player 1 gives a clue to the location by saying what direction the spring is in relation to the guess, and Player 2 guesses again.
- 4. The play continues until Player 2 has correctly guessed the location of Lost Spring.
- 5. Continue by taking turns hiding and finding Lost Spring.



The following excerpt is from Commerce of the Prairies, Volume II, 1831-1839 written by Josiah Gregg.

"Having crossed the Prairies between Independence and Santa Fé six times, I can now present a table of the most notable camping sites, and their respective intermediate distances, with approximate accuracy—which may prove acceptable to some future travellers. The whole distance has been variously estimated at from 750 to 800 miles, yet I feel confident that the aggregate here presented is very nearly the true distance.

-Gregg."

Gregg, Josiah. Commerce of the Prairies, Volume II, 1831-1839. Cleveland, Ohio, The Arthur H. Clark Company, 1905. The following is taken from footnote 59 in Chapter XVI.

A complete copy of the book can be found at http://www.gutenberg.org/ebooks/44205



