

Activity Compare and contrast historic and modern travel routes through the state of Missouri.

MO Learning Standards for Social Studies

MLS- 3.GS.6-8 Geography. D: Locate cities of Missouri, the United States, and the world.

MLS- 3.GS.6-8 Geography. A: Create and use maps, graphs, statistics, and geo-spatial technology in order to explain relationships and reveal spatial patterns or trends.

MLS- 1.HCC.6-8 Geography. E: Analyze the cause and consequences of a current geographic issue as well as the challenges and opportunities faced by those trying to address the problem

Learning Outcomes

- Students will be able to locate points on the map to calculate distance and travel time.
- Students will be able to explain how technology has affected travel throughout history.

Map URL: <http://arcg.is/1vCj5r>

Ask

How long did it take the Lewis and Clark expedition to travel across Missouri?

- The Corps of Discovery was created to explore the Louisiana Purchase via the Missouri River. The group traveled in canoes up and down the river from 1804-1806.
- Click on the camps04 layer and click on “show table”. Click on the column labeled “Camps04-ID” and click “Sort Ascending” to answer the question below.
- ? Look at camps04-Id column to find camp #3. Click on the row to highlight points on the map. Describe where camp #3 is located and the date the explorers camped there: (*North of St. Louis/eastern Missouri; camped here on May 14, 1804*)
- ? Now find camp #214 in that same column and click on the row to highlight the point on the map. Where is this campsite located and what is the date they camped here? (*Around Kansas City/western Missouri; camped here on June 26, 1804*)
- ? How long did it take the Lewis and Clark expedition to travel from St. Louis to present-day Kansas City? (*6 weeks*)

Acquire

Where are the major interstate highways located in Missouri?

- Click the “Content” tab and turn on the MO 2017 TIGER PRIMARY ROADS layer.
- ? What interstate highway most closely follows the Lewis and Clark trail going in an east-west direction? (*I-70*)
- ? What interstate highway most closely follows the Lewis and Clark trail going in a north-south direction? (*I-29*)

Explore

What major cities are located along Missouri interstates?

-Turn off the Camps04 layer and answer the following questions

- ? What cities are connected by Interstate 44? (*St. Louis, Rolla, Lebanon, Springfield, Joplin*)
- ? What cities are connected by Interstate 55? (*St. Louis, Arnold, Festus, Cape Girardeau, Caruthersville*)



Analyze

How do different types of transportation affect travel time?

- Turn on the Camps04 layer and then click on the “Measure” tab and select “Distance”.
- ? How many miles is it from St. Louis to Kansas City? (~240 miles)
 - Open up Google Earth and click on “Get Directions” and type in St. Louis and Kansas City in each of the location boxes.
- ? How many miles is it from St. Louis to Kansas City according to Google Earth’s calculation? (248 miles)
- ? Now measure the distance from St. Louis to Kansas City by tracing the campsites along the Lewis and Clark trail. Why is this distance longer than the previous measurement? (*Lewis and Clark followed the Missouri River which is winding and not a straight line between two points; therefore the Lewis and Clark’s travel distance is longer.*)
- ? What do you notice about the distribution of campsites and what might explain the pattern? (*They are not evenly spaced the distance traveled varied by day which could be the result of a weather conditions, river conditions, health of crew, damage to canoes, etc.*)



Act

How might travel patterns change in the future?

- ? If you were to design a new transportation route through Missouri, where would you place it and why? (*Answers will vary.*)
- ? What new forms of transportation might be invented in the future? How would it decrease travel time? (*Answers will vary.*)

SHOW TABLE AND SORT

- In the “Contents” pane, click the “Show Table” icon.
- Click the field name (top row).

MEASURE

- Click the measure tool
- Select distance and choose the unit of measurement
- Click and drag from location to location