Moving Across Missouri

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 geospatial 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