



Surf the Mississippi

Instructions for students:

Visit the following internet sites and answer the following questions.

A. Explore Historic Fort Snelling Virtual Tour at:

<http://www.mnhs.org/places/sites/hfs/tour/tour.html>

1. The confluence of what two rivers is shown on the diagram?
2. Why do you think the fort was built at this location? (Click on "Fort Snelling History" below the diagram for more information.)
3. Explore any two of the eighteen features on the diagram (using the hot links.)
 - 1) Describe the two features, and what they were used for.
 - 2) Why were these features important to the fort?

B. Explore St. Anthony Falls at:

<http://www.mvp.usace.army.mil>

First click on "History," then "Historical Brochures", then "Engineering the Falls."

1. Click on the diagram of the falls to enlarge it. What is the main idea shown by the diagram?
2. Read the first paragraph in the "Overview" section, then name four values or uses that people have had for St. Anthony Falls.
3. Scroll down to the part about "Geology."
 - 1) 12,000 years ago a huge waterfall over 175 feet tall existed near what present-day place?
 - 2) From its origins near _____, St. Anthony Falls retreated slowly upstream at about _____ feet per year until it reached its present location.
 - 3) Geologists estimate that the waterfall was originally about _____ feet high, but by the early 19th century, explorers described it as only about _____ feet high.

C. Explore historical river vessels (boats) at:

<http://www.mnhs.org/>

Click on "Search." Then type in "Mississippi River vessel types."

Find and click on "Vessel Types on Minnesota's Inland Waters."

1. Name three ways of powering a vessel on the Mississippi River without fuel.
2. Describe a flatboat. How was it propelled and steered? What were its uses?

D. Optional: Explore other river-related web sites:

1. <http://www1.umn.edu/bellmuse/ecogames.html> (watershed game for kids)
2. <http://www.epa.gov/OWOW/NPS/kids/> (aquatic bug theater, kids' water activities)
3. <http://www.epa.gov/OGWDW/kids/> (water activities, art and experiments)
4. <http://www.ga.usgs.gov/edu/earthrivers.html> (earth's water, water science)
5. <http://www.oldmanriver.com/Pages/timeline.htm> (2 page historical timeline)
6. <http://cgee.hamline.edu/watershed/resources/index.htm> (about watersheds including teacher resources)
7. <http://www.nps.gov/miss/> (Mississippi National River & Recreation Area)

Teachers' notes re: "Surf the Mississippi"

A.1. The diagram shows the confluence, or meeting place, of the Minnesota and Mississippi Rivers.

A.2. (Answers will vary.) The fort was strategically built at this location because the river confluence was a key intersection for transportation at that time and a center for fur trade. This location allowed U.S. Army soldiers to control traffic on the two key rivers of the area. (For more information, click on "Fort Snelling History" and then "An Outpost in the Wilderness.")

A.3. (Answers will vary with the feature being described. Explore web site for information.)

B.1. The diagram shows the recession, or erosion, of the waterfall from 1660 to 1887.

B.2. The falls have been valued for religious significance, a landmark, geological interest, scenic beauty, water power, and navigation.

B.3. 1) 12,000 years ago the predecessor of St. Anthony Falls was located near downtown St. Paul. (It is referred to as River Warren Falls.)

B.3. 2) what is now Ft. Snelling; four

B.3. 3) 180; 16-20

C. The exact web site location is...

<http://www.mnhs.org/places/nationalregister/shipwrecks/mpdf/incraft.html>

C.1. Ways to power vessels on the Mississippi River without fuel include: wind, water, hand (human power or paddle), and horse. (Indicated in first subtitle of this web site.)

C.2. Flatboats are strong, box-like boats with flat bottoms, perpendicular sides, and upturned ends. They sometimes were covered throughout their entire length. They were constructed to float with the current (they were water-powered) and were steered by large oars or sweeps placed at the ends. Most flatboats never returned after descending the river; often, they were dismantled and used or sold for lumber at their downstream destination.