

## Exploring the Big Four® Bridge Activity

*by Kenny Karem, author of Discover Louisville and Probing the Wonders of the Falls*

Here are a few questions and activities to help you appreciate your walk on the Big Four® Pedestrian/Bicycle Bridge.

1. The Big Four® Bridge is named for the railroad company that built it in 1895—the Cincinnati, Chicago, Cleveland & St. Louis RR Company. Of those cities, which one was named after a Roman soldier and has “hills” surrounding it like Rome.
2. Fast Bird Alert. You might be lucky on your walk on the bridge and spot one of the following fascinating birds: cliff swallows—nesting on the first ramp supporting concrete pier on the KY shore, peregrine falcon—nesting on one of the bridges; Osprey—nesting in a tall tree on the shoreline, American bald eagle—nesting on Shippingport Island in the Falls of the Ohio National Wildlife Conservation Area. All of them will be soaring and flying rapidly in the area, but which one is the fastest?
3. You can see two major islands and both are related to river transportation in some way. One is called Shippingport Island and once was the site of a river port north of and next to the Portland Canal. (downstream on the left). You can see it on the way up the KY ramp. The other island, Towhead Island, is upstream to the right where barges are currently “docked”. You can see it from the upstream side of the bridge. Explain the meaning of or reason for the NAMES of these two islands.
4. The Ohio River is the 2<sup>nd</sup> longest river in the U.S. The Falls of the Ohio is the only “rapids” on this river. In what city that is located over 600 miles upstream does the Ohio River begin? Bonus point: Name the 3 rivers that come together in that city which is the starting point of the Ohio River.
5. The Ohio River flows west under the bridge and is at its widest in the Louisville area due in part to the McAlpine Dam. That is a lot of flowing water! In to what body of water does it flow?
6. There are 4 limestone piers in the river and 3 concrete piers on land that support the bridge. The limestone was quarried locally and has fossils in it. The Falls of the Ohio State Park and National Wildlife Conservation Area has the largest amount of exposed Devonian fossil beds in the world, containing over 400 species. Look towards the McAlpine Dam steel gates on the Indiana shoreline downstream beneath the Conrail RR Bridge to view the park. Name one general fossil that would be in that park.
7. When the Conrail Railroad Bridge (originally the Falls Bridge) crossed the Portland Canal in 1870, the smoke stacks of the steamboats were so high that they would hit the bridge. Consequently, some smokestacks were designed to fold down. But engineers figured out another way to make a change to the bridge to allow the tall steamboats to pass under it and enter the Portland Canal. What did they do to the bridge to help the steamboats pass under the bridge through the canal.. (Observe

carefully from the Kentucky ramp, look downstream at the Portland Canal and Conrail Railroad Bridge and you will figure it out... maybe).

8. Tricky question. If a mammoth spat off the bridge on the downstream side, what geographical direction would the spit travel once it entered the river?
9. Which of the 6 Bridges across the Ohio River at Louisville is the oldest bridge? Bonus point: Within 5 years, when was it built? (Hint: It was the 1<sup>st</sup> railroad bridge to cross the river locally)
10. From the bridge, name six forms of transportation that you can actually see. (6 things that move humans).
11. Notice from the ramps downstream the McAlpine Dam with 5 steel gates next to the Indiana shore crossing the Ohio River, with a concrete wall of the dam extending down the middle of the river to the lower dam section and the LG & E Hydroelectric Power Plant. What is the purpose of the dam? (VERY few people know the purpose of the dam, so be smarter than the masses)
12. If you walked from Kentucky all the way across the bridge and down the ramp on the other side to Indiana, guess what city you would be in? (Hint: It is named after a U.S. president).
13. Looking downstream to the left, you can see the Louisville Bats baseball team's home stadium. What famous baseball item was invented in Louisville and is still used by baseball players in all minor and major league baseball stadiums, including that one?
14. Notice in Waterfront Park near the river (on the Kentucky shore line), there is a bronze statue of President Abraham Lincoln, along with some interpretive panels of his life, created by Louisville sculptor, Ed Hamilton. Lincoln was elected president, as a resident and former congressman from Illinois. But he was born elsewhere and raised in two other states. Name the two states.
15. During the American Revolution, General George Rogers Clark established Louisville as a defensive outpost against the British in the Northwestern Territory. The original fort was on Corn Island near the Louisville wharf where the Belle of Louisville now docks. With rising river levels due to dams built on the river, the island is now under water. What local river city was named after General Clark who won the Northwest Territory for the American colonies?
16. If you see the Belle of Louisville docked at the Louisville Wharf downstream or cruising the river, note that it is the oldest steamboat in the U.S. (1914). In the 1880s, hundreds of steamboats docked at the Louisville Wharf. Of course, the Belle's fuel was coal originally, then its engine was converted to gas for cleaner burning fuel. Besides the engine burning fuel and moving the engine pistons and crankshafts, what other thing actually makes the boat move up and down the river? Be precise. (Go enjoy a wonderful public cruise and you can admire this wonderful invention)
17. Time for a challenging question. There were six original Falls cities, or river ports, surrounding the dangerous Falls of the Ohio. You can see most of them today from

the bridge. Name all these cities –3 each in Kentucky and Indiana, but one in Kentucky is no longer there. (This former “Falls city” had been devastated by many floods, particularly the great 1937 Flood. The last residents were moved off the island and the town was razed by the Army Corps of Engineers in the 1950s for canal expansion and location of its repair facilities)

(Hint: The one that has disappeared was formerly located on an island in the river downstream. Oh yeah... it was mentioned here previously... remember?)

18. When the Big Four® Bridge was constructed in 1895, the steel truss spans were an impressive engineering feat of the day that enabled bridges to span large bodies of water, including nearly a mile at this point on the river. (Numerous workers died building this bridge). Walking under them is like entering a “cathedral of steel buttresses”. How many spans are there?
19. Many of these Falls cities were part of the steamboat building industry, with the most famous company being the Howard Steamboat Yards, located upstream on the Indiana shoreline. (You can visit a unique steamboat museum, the Howard Steamboat Museum, located in the magnificent old Howard family residence. You can actually see it on the river, upstream on the Indiana shoreline). After the steamboat –building industry ended in the early 1900s, a new type of boat-building industry appeared in the same location that you can see from the bridge on the Indiana shoreline. (Look for the construction cranes) What type of boats do they build today? Bonus point: Name the company.
20. A famous folk song was written long ago about the Ohio River. It starts with...”I asked my love, to take a walk, ... down beside, where the river flows...” What is the name of the song?

## ANSWERS to Exploring the Big Four® Pedestrian/Bicycle Bridge Activity

1. Cincinnati
2. Peregrine falcon (about 200 mph)
3. Shippingport—a port on the river for shipping; Towhead Island—an island where tow boats park
4. Allegheny, Monongahela and Ohio Rivers
5. Mississippi River
6. Many possible answers: coral, crinoid, brachiopod, cephalopod, trilobite, blastoid, gastropod
7. A lift bridge was built over the canal, one of the last surviving ones in the US
8. Mammoths are extinct so they would not be walking on the bridge!!  
However, you can have one point if you said West or even Northwest
9. Conrail Railroad Bridge (originally the Falls Bridge); Bonus: 1870
10. Possibly car, truck, bus, steamboat, towboat, recreational boat, airplane, railroad, bicycle, skateboard, van... and sometimes a hot air balloon
11. The dam holds back the Ohio River thus raising its elevation so that the river is wider and deeper. Then towboats, barges and steamboats can navigate the river and go through the Portland Canal
12. Jeffersonville for President Thomas Jefferson (Both states have Jefferson County on the river)
13. Louisville Slugger baseball bat
14. Kentucky and Indiana
15. Clarksville, Indiana
16. Paddlewheel
17. Kentucky: Louisville, Portland, Shippingport Indiana: Jeffersonville, Clarksville, New Albany
18. 6 spans
19. Barges. Bonus: Jeffboat Inc.
20. Banks of the Ohio