Name _____

Galloping Gertie

On July 1, 1940, thousands of people gathered to celebrate the opening of a new bridge near the city of Tacoma in Washington State. Marching bands played. The governor of Washington State drove the first car across the bridge.

Everyone praised the beauty of the bridge. Some called it the “baby brother” of the Golden Gate Bridge. In both bridges, great steel cables stretched over two tall towers. The roadway hung from these cables, free to move in strong winds.

People driving across the Golden Gate Bridge didn’t notice the bridge moving. But the bridge near Tacoma was a different story. The wind made the bridge bounce and ripple. Driving on it made some people seasick.

The bridge’s official name was the Tacoma Narrows Bridge. But people gave the bridge a nickname. They thought crossing this bridge was like riding a galloping horse. So they called the bridge “Galloping Gertie.”

Bridge engineers feared that the bridge might not be safe. So they built and tested a model of the bridge. When the wind blew on the model bridge in a certain way, the roadway twisted back and forth. Bridge engineers said that the same twisting on the real bridge would be dangerous. The engineers figured out how to change the model bridge to prevent twisting. Then they started making those changes to the real bridge.

But time ran out on November 7, 1940. Early that morning, strong winds blasted the bridge from the side. The bridge began bouncing and rippling. At 10 a.m., the roadway started twisting. It tilted up on one side and then on the other. A delivery van crossing the bridge tipped over, but the people inside got out before it fell. The state police stopped everyone from crossing the bridge.

Finally, at 11 a.m., the twisting of the roadway and the pushing of the wind tore the bridge to pieces. Great steel bars twisted like rubber and the cables snapped. Chunks of concrete tumbled into the chilly waters below. With a roar like thunder, the bridge collapsed into the water with a huge splash.

After that, some people worried about the Golden Gate Bridge, the “big brother” of the fallen bridge. They asked Charles Ellis, the man who designed the Golden Gate Bridge, to look at what had gone wrong with the Tacoma Narrows Bridge. Ellis explained that the Golden Gate Bridge had a much wider roadway. It would not twist in any wind.

Ten years after the collapse, a new bridge was built. The newspapers called it “Sturdy Gertie.” The bridge has lived up to that name. Today, millions of cars cross it each year.