



The  
Meandering  
River



**A stream table model shows how the land behaves when water rushes through it. It shows how rivers, streams and arroyos are formed.**





I'm trying to figure out why our river, the Rio Grande, meanders.

Why are you doing that?



What does  
meander  
mean?



Sometimes the speed of a river's water combined with the debris in the river causes the river to create a winding shape sort of like a snake.





THIS HAPPENS BECAUSE OF

EROSION,

DEPOSITION,

& FLOW

**When water flows at different speeds, it can cause rocks and soil to break apart and flow down the river.**



**When these rocks hit the sides of the riverbank with great force, it causes the sides of the river to erode and change shape. These rocks are then deposited in the river, helping to make a new water path.**





**This was a problem in the El Paso area because our river is the border between two countries, the US and Mexico.**

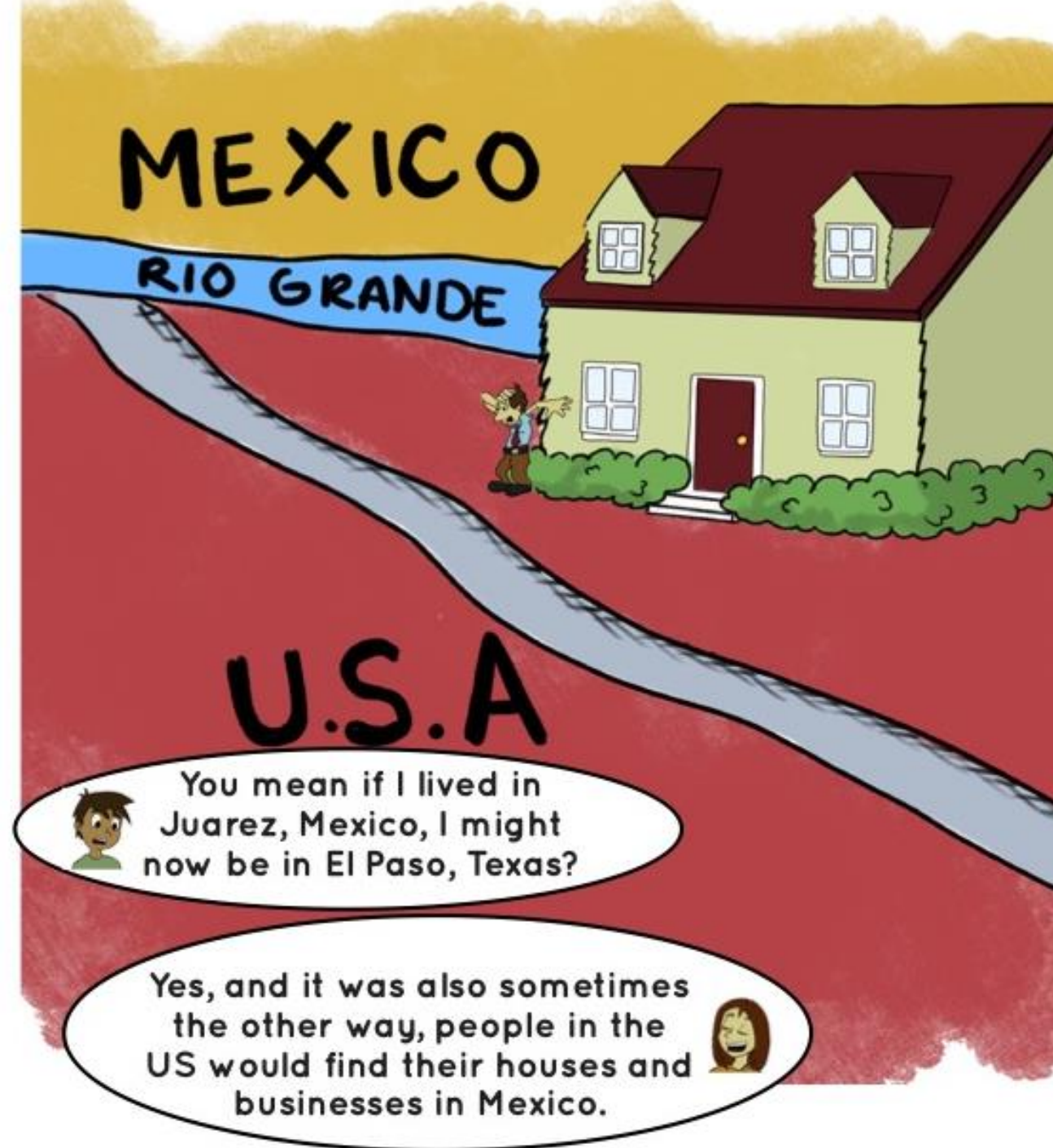


**After the Mexican-American war, the US signed a treaty, called the Treaty of Guadalupe Hidalgo. This treaty said that the river would be the boundary between two countries.**





Problems arose when the river changed course because of meandering. Sometimes the river would find another path to flow and people living along the river might find that their houses or land were now in another country.



You mean if I lived in Juarez, Mexico, I might now be in El Paso, Texas?

Yes, and it was also sometimes the other way, people in the US would find their houses and businesses in Mexico.


Whoa! I'm glad I don't live close to the river.

Well, it doesn't happen anymore. In 1963 President Johnson of the US and President Mateos of Mexico agreed to create a cement liner in the river in El Paso to stop the river from changing paths through the city.



**Any land on either side of the river remained with that country. This agreement is called the "Chamizal Treaty."**



 Why did they name it the Chamizal?



In order to build the channel, our country sacrificed a neighborhood called El Chamizo (named after the “chamizo” saltbush plants that lined the Rio Grande.) 5600 residents had to be relocated when the channel was built!

The Chamizal National Memorial commemorates the sacrifice of this neighborhood to create the cemented channel. To commemorate the treaty, a park was built on both sides of the border. Both parks are named Chamizal National Memorial Park.





**I'm building two models, a river that meanders and a river that cannot.**

