

Evidence from the continents (other than shape)

A. Tectonic patterns---if you put the continents back together as you suspect they were, then if there was a mountain range on one continent it should connect with a mountain range on the other continent. If there was part of a structural basin on one continent, it should connect with a structural basin on the other continent. If there are different structural patterns, it is suspect that they were not once joined together.

B. Stratigraphic sequences---just because you have similar tectonic patterns you also must consider if the rock type sequence and the age relationships are the same. For example if one structural basin has a rock sequence that goes from ss (oldest), then ls, then ss, then sh, then ls, then ss, then ls (youngest) and the other structural basin goes from ls (oldest), then ss, then sh, then ls,

then sh, then ls (youngest), these structural basins are not the same sequence of rock types and were not connected. If the sequence of rock types is the same then we must consider the age of the rocks. If the ages are different, the continents were not connected. If both the sequence of rock types and the age of those rocks are the same, then there is a chance that they were connected at one time.

To expand this idea, find some Monopoly money. Pick 5 \$1 bills, 5 \$5 bills, 5 \$10 bills, 5 \$20 bills, and 5 \$50 (if they exist) bills. Write on the right side and the left side of each bill the same random 4 digit number. Tear in half. Place half of each bill on a rope with clothes pins hanging on one side of the room. Do the same with the other half of the bills on the other side of the room.

You suspect that they may have been together at one time. Pick one bill from one

side of the room. Let's say you pick a \$20. Which ones on the other side of the room are you going to use for comparison? You will pick the \$20 bills. You ignore the other denominations. This is the same as using tectonic patterns. You know the bill you have matches one of the other \$20 bills. Which one? Now compare the serial numbers of the one you have with the serial numbers of the other \$20 bills. The same serial numbers mean the bills were once connected. This is the same as using stratigraphic sequences in conjunction with tectonic patterns.