

### **What is Pangaea and how did it form?**

Imagine living on the earth when there was no one in sight. Five hundred million years ago, all of the continents on earth were connected. The land all life (during this time) is standing on the global super continent of Pangaea. One small step from South America can take you straight to Africa. Five hundred million years ago, Mother Nature's jigsaw puzzle (Pangea) was put together. During the centuries, Pangea was connected numerous changes above and below the land occurred. Soon after Pangaea the plates under it touched, they started moving away the other plates. Pangaea was a landmass that included all of the present day continents and was on this earth for many, many millenniums.

After the discovery of Pangaea, it was widely known as a global super continent. The time this chunk of land was together was from the late early Permian period to the early Jurassic period. Although many people think of Pangaea as a great, big piece of land, it was really a series of extremely large islands- connected. Scientists in the 21<sup>st</sup> century divided Pangaea into two main sections: Gondwanaland and Laurasia. The super continent of the southern hemisphere, Gondwanaland, included Australia, Antarctica, India, Africa, and South America. Laurasia, the super continent of the northern hemisphere consists of North America, Europe, and Asia. Pangaea was formed through the movement of plates and the collision of three main blocks of land.

Towards the end of the Paleozoic period, the Permian period, plates that formed Pangaea shifted themselves together. The three main blocks of land Gondwanaland, Euramerica, and Siberia, put Pangaea together. These landmasses were part of Rodinia, the former super continent, as well as Pangaea. A few centuries after the majority of

Pangaea was completed, smaller islands also attached themselves with the mainland of Pangaea. All of these pieces of Pangaea created the classic Pangaea configuration. However, right after Pangaea was connected it was as if a giant stepped on this global super continent.

The plates forming Pangaea separated almost right after they touched. It took the continents 25,000 millenniums to separate from each other and changed Pangaea to the continents that hold all civilization today. During those years that Pangaea was separating, animal dynasties arose, flourished, and then died out. At the end of the Triassic period, did mammals, dinosaurs, and pterosaurs appear on the surface of the earth and Pangaea. Finally, during the final days of Pangaea small Mesozoic mammals diversified, or varied. There were many changes on the surface of the great super continent, Pangaea, including separating into the seven continents resting on the earth's exterior, today.

The continents were once joined in a continent covering a large portion of the earth, that continent known as Pangaea. Scientists have claimed that the movement of the plates called continental drift formed Pangaea. This global super continent, containing all of the present-day continents changed in many ways, including how it eventually evolved into the continents today. Maybe in the future, there will be a super continent similar to Pangaea.

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