THE SUPERCONTINENT CYCLE OF EARTH

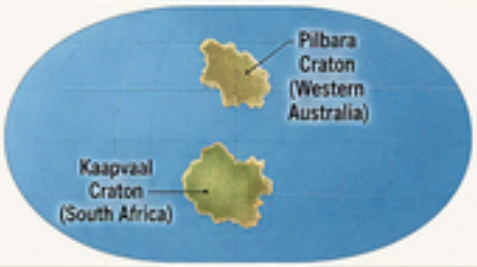
From Earth's Earliest Landmasses to the World as We Know It

1 VAALBARA

(approx. 3.6 – 2.8 Billion Years Ago)

Status: Highly theoretical.

Description: Considered one of Earth's first "proto-supercontinents." It was likely much smaller than modern continents, consisting of two stable crustal blocks (cratons): the Kaapvaal craton (South Africa) and the Pilbara craton (Western Australia).

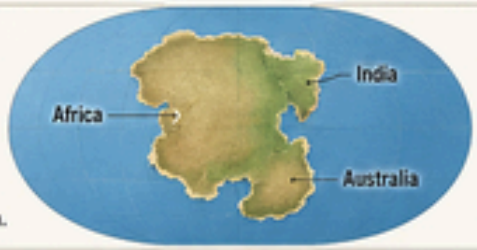


2 UR

(approx. 3.0 – 2.8 Billion Years Ago)

Status: Proposed small supercontinent.

Description: Though potentially smaller than modern-day Australia, Ur is often called a supercontinent because it may have been the only significant landmass on Earth at the time. Parts of it eventually became pieces of Africa, Australia, and India.



3 KENORLAND

(approx. 2.7 – 2.1 Billion Years Ago)

Status: Generally accepted.

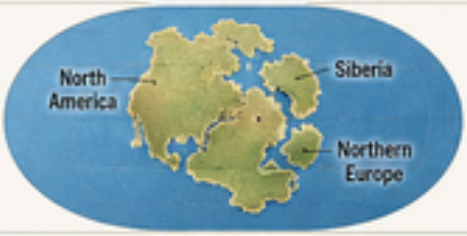
Description: Formed during the Neoarchean Era, Kenorland was a significant landmass located near the equator. Its breakup is often linked to the Huronian glaciation, one of the longest "Snowball Earth" periods in history.

4 COLUMBIA / NUNA

(approx. 1.8 – 1.3 Billion Years Ago)

Status: Widely accepted.

Description: Columbia (also known as Nuna) was the first "true" massive supercontinent, estimated to be about 12,900 kilometers long. It consisted of the proto-cratons that now make up North America, Siberia, and Northern Europe.

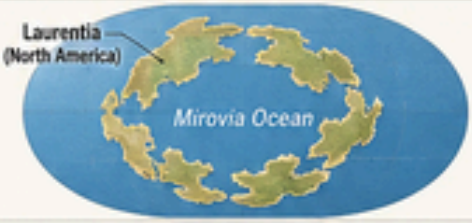


5 RODINIA

(approx. 1.1 Billion – 750 Million Years Ago)

Status: Well-established.

Description: Rodinia formed during the Neoproterozoic. It was centered around Laurentia (modern North America) and surrounded by a global ocean called Mirovia. Its breakup eventually led to the formation of the Pacific Ocean.



6 PANNOTIA

(approx. 633 – 573 Million Years Ago)

Status: Debated / Short-lived.

Description: Also called the Vendian supercontinent, Pannotia was a V-shaped landmass centered near the South Pole. It formed and fragmented relatively quickly in geological terms, existing for only about 60 million years.

7 GONDWANA

(approx. 550 – 180 Million Years Ago)

Status: Well-established.

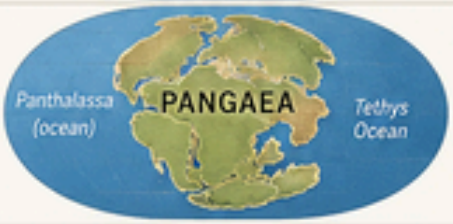
Description: While not always containing all land on Earth, Gondwana was a massive southern landmass comprising modern-day South America, Africa, Antarctica, Australia, and India. It eventually merged with other landmasses to form Pangea.

8 PANGEA

(approx. 335 – 175 Million Years Ago)

Status: Definitively proven.

Description: The most famous and recent supercontinent, Pangea (meaning "all lands") was surrounded by the superocean Panthalassa. Its breakup during the Jurassic period led to the modern configuration of our continents and the formation of the Atlantic Ocean.



Earth is constantly changing. Supercontinents form, break apart, and reform in an endless geological cycle driven by plate tectonics over billions of years.