

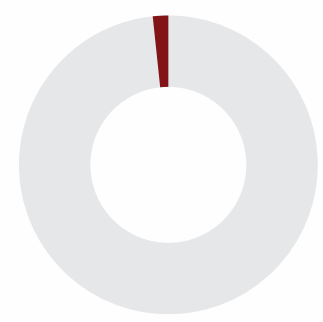
Important events in evolution

Significant events which impacted the history of Earth

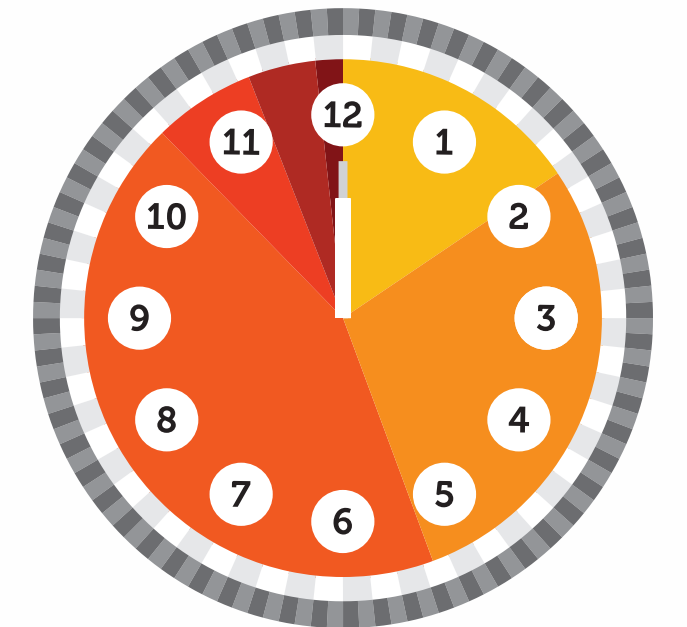
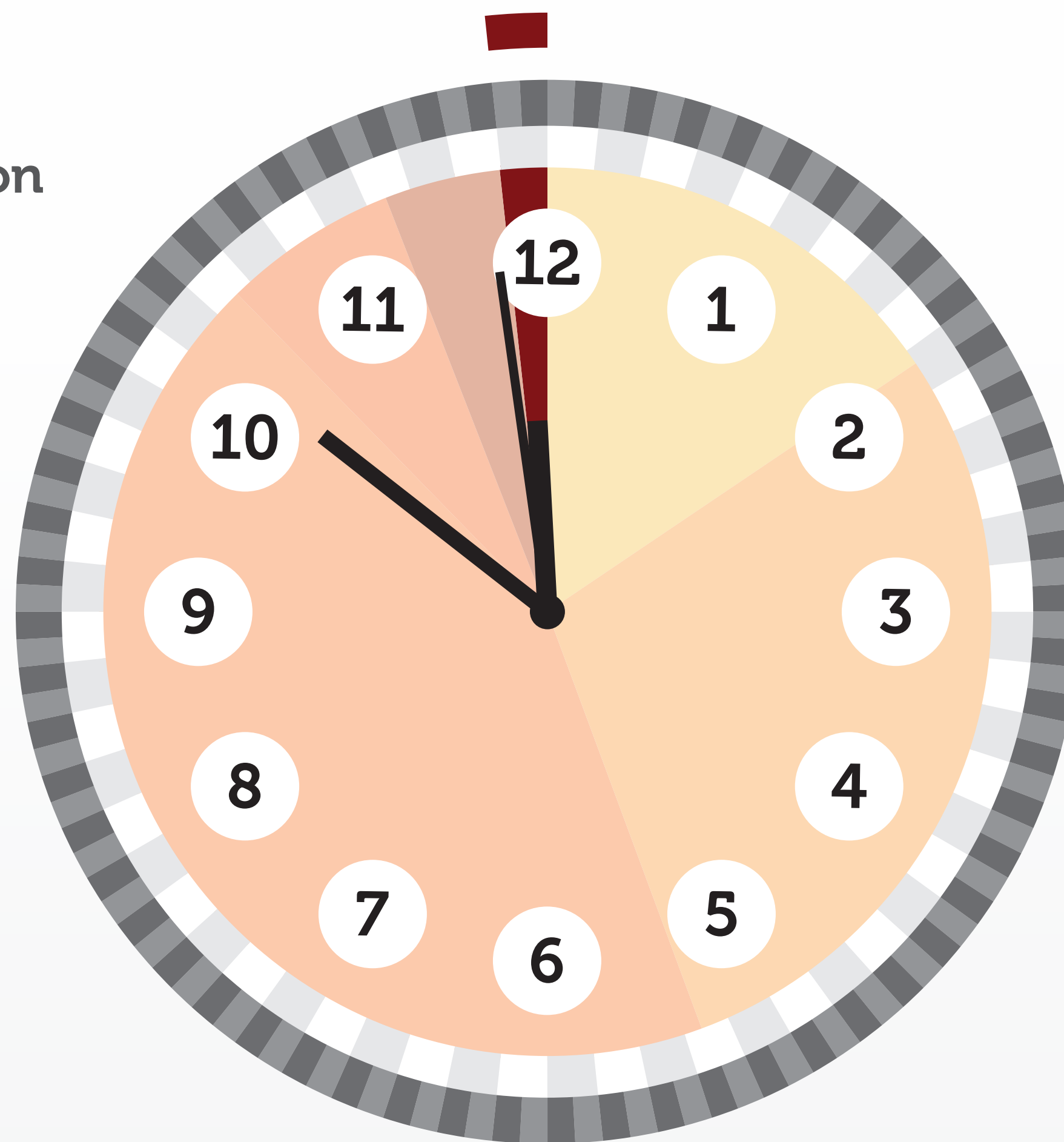
45 million years ago

The continents reach their current shape and configuration

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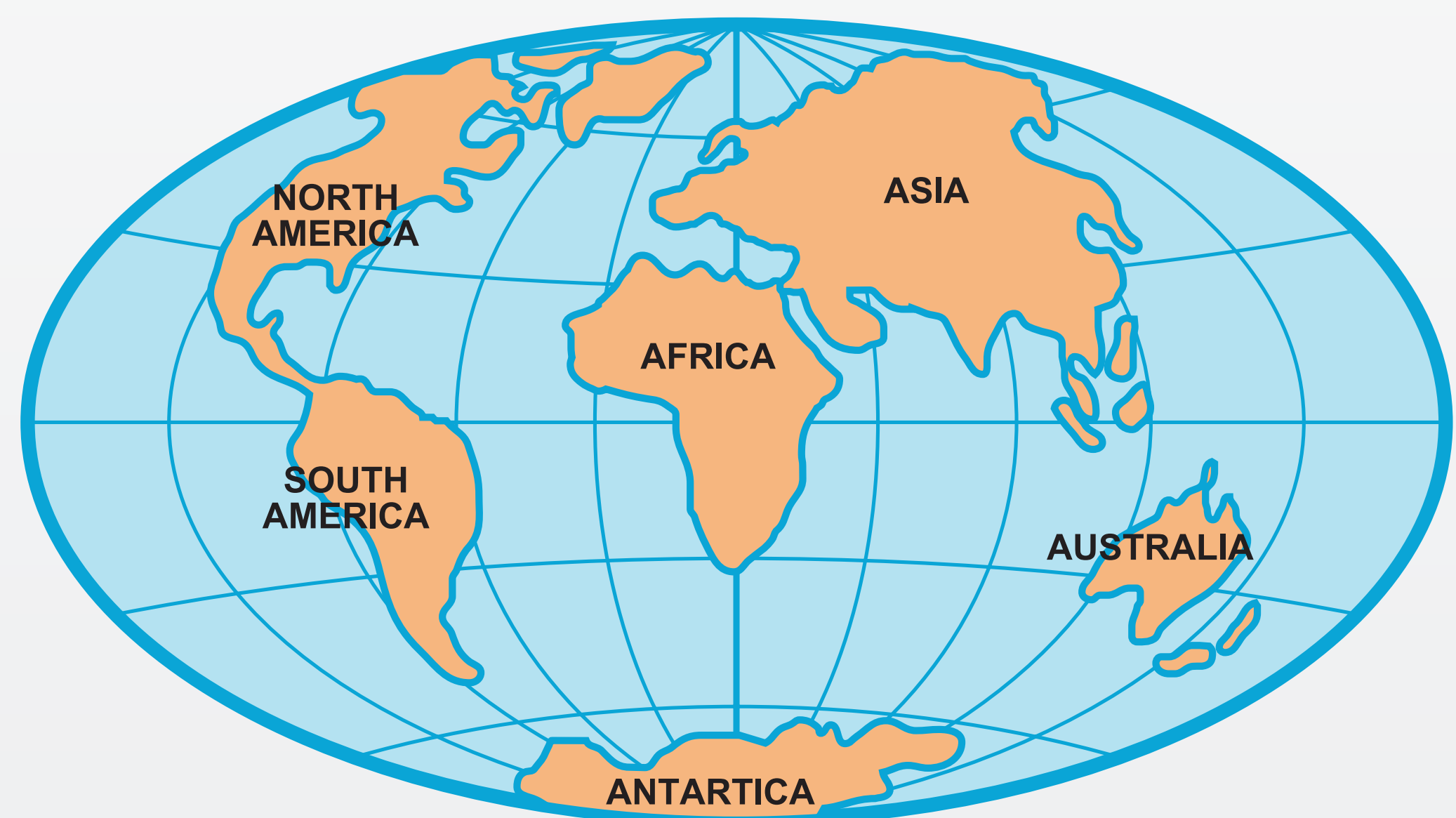
Continents reach current configuration



45 million years ago, continents were already positioned and with a very similar shape like today. They had been drifting since Pangaea broke apart into Laurasia and Gondwana 180 million years ago.

One difference from today's geography is there was a gap between North America and South America. The fauna of North America was very different from the fauna of South America. The waters of the Atlantic and the Pacific Ocean flowed freely.

Around 15 million years ago, the collision of tectonic plates produced volcanic activity in the region, creating many islands.



These islands enlarged until they formed a contiguous strip of land that united North and South America in the present Isthmus of Panama. The fauna from each continent migrated towards the other. There was speciation in the sea around the Isthmus of Panama since a strip of land separated some species. Currently, there are seven different shrimp species on each side of the Isthmus. For each one of them, their most closely related species is across the Isthmus.

Another difference is that India was an isolated continent since it had broken away from Gondwana, beginning its long existence as an island and heading north at a speed of 15 cm per year, eventually colliding with Asia about 10 million of years ago. India at that time was similar to present Australia, a huge island detached from the rest of the continents, with its very own species.