NEOPROTEROZOIC ERA (1000-542 Ma)

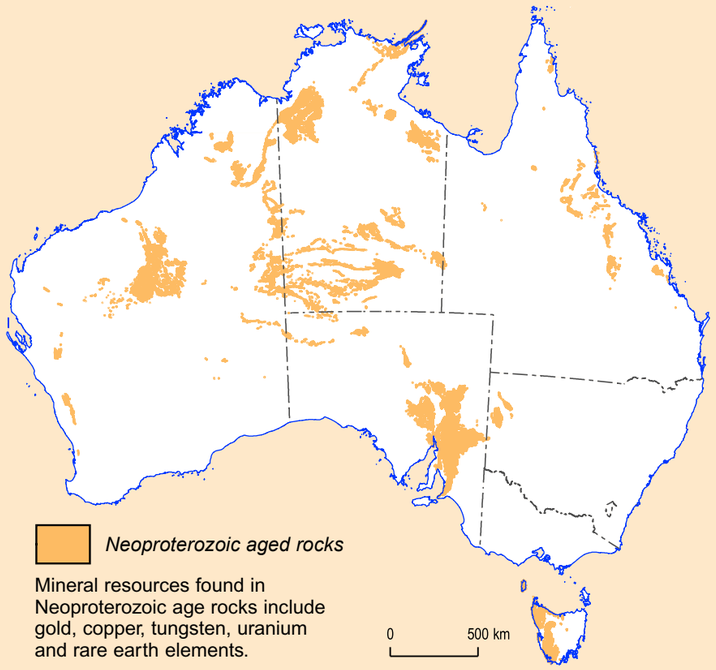
Geological TimeWalk

Throughout this era, the supercontinent Rodinia rifted apart to form three major continents: West Gondwana, East Gondwana and Proto-Laurasia. At the end of this era, East and West Gondwana collided to form a new supercontinent **Gondwana**.

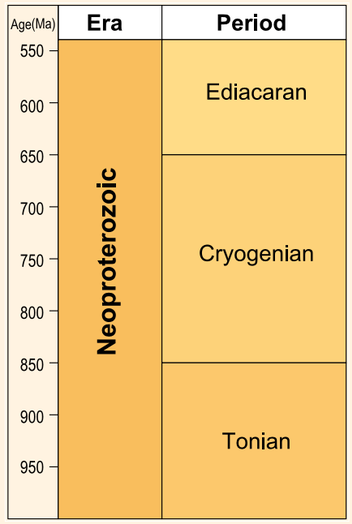
Global temperatures plummeted in the middle of this era, causing a series of intense glaciations. At times the Earth's entire land surface may have been covered by ice. This is referred to as the **'Snowball Earth' hypothesis**.

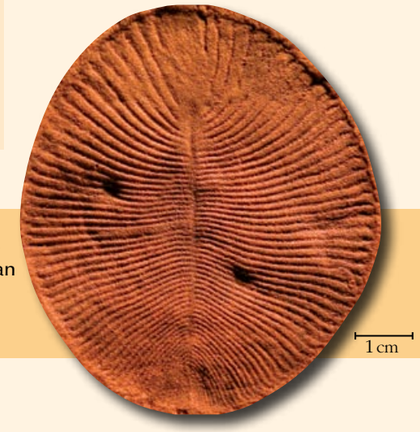
As the Earth warmed following these severe glaciations, the ice caps melted and life diversified dramatically. The **first complex marine animals** appeared. They are known as the 'Ediacara Biota', and include jellyfish, worms and sponges. Most of this biota did not survive into the Cambrian Period.

Neoproterozoic rocks and resources in Australia



Neoproterozoic Timescale





Dickinsonia costata **is an example of the 'Ediacara Biota' found in the Ediacara Hills, South Australia.**

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During the Neoproterozoic Era, a large meteorite struck the Gawler Ranges in South Australia, leaving a crater 90 kilometres wide, which today contains Lake Acraman.

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