

Learning Intentions

- To learn how the land masses of the Earth drift around.
- To learn the evidence that supports the theory of continental drift.

Notes



1. Maps of the world led Wegener to propose the theory of continental drift in 1912.

1. This theory states that the continents have drifted to their current locations over millions of years.

2. The theory is supported by 4 main pieces of evidence:

1. The continents fit together like jigsaw puzzle pieces.

a. On the map above, find two continents that look like they would "fit together"

East coast of South America and the West coast of Africa

b. Millions of years ago, there was a super-continent called Pangaea

Pan: all

Gaea: Earth

See over →

2. Matching geological structures and rocks.

a. Rocks of the same type and age have been found in Newfoundland,
Sweden, Norway, and Scotland.

3. Evidence from fossils

a. On different continents, we have found similar fossils.

- Mesosaurus fossils have been found **only** in southeastern South America and southwestern Africa.

4. climate evidence

a. Glossopteris (a fern) fossils have been found from South America to Africa to Australia to India to Antarctica.

- Ferns cannot grow in cold climates, so Antarctica used to be closer to the equator.

b. There are coal deposits in Antarctica.

- Coal is created by the decomposition of living things.

5. Evidence of glaciers in tropical areas such as India and Africa.

- Paleoglaciation: The extent of ancient glaciers and the marks they left in the rocks.