

# MAJOR DOMAINS OF THE EARTH

Atmosphere

Biosphere

Module 1

Lithosphere

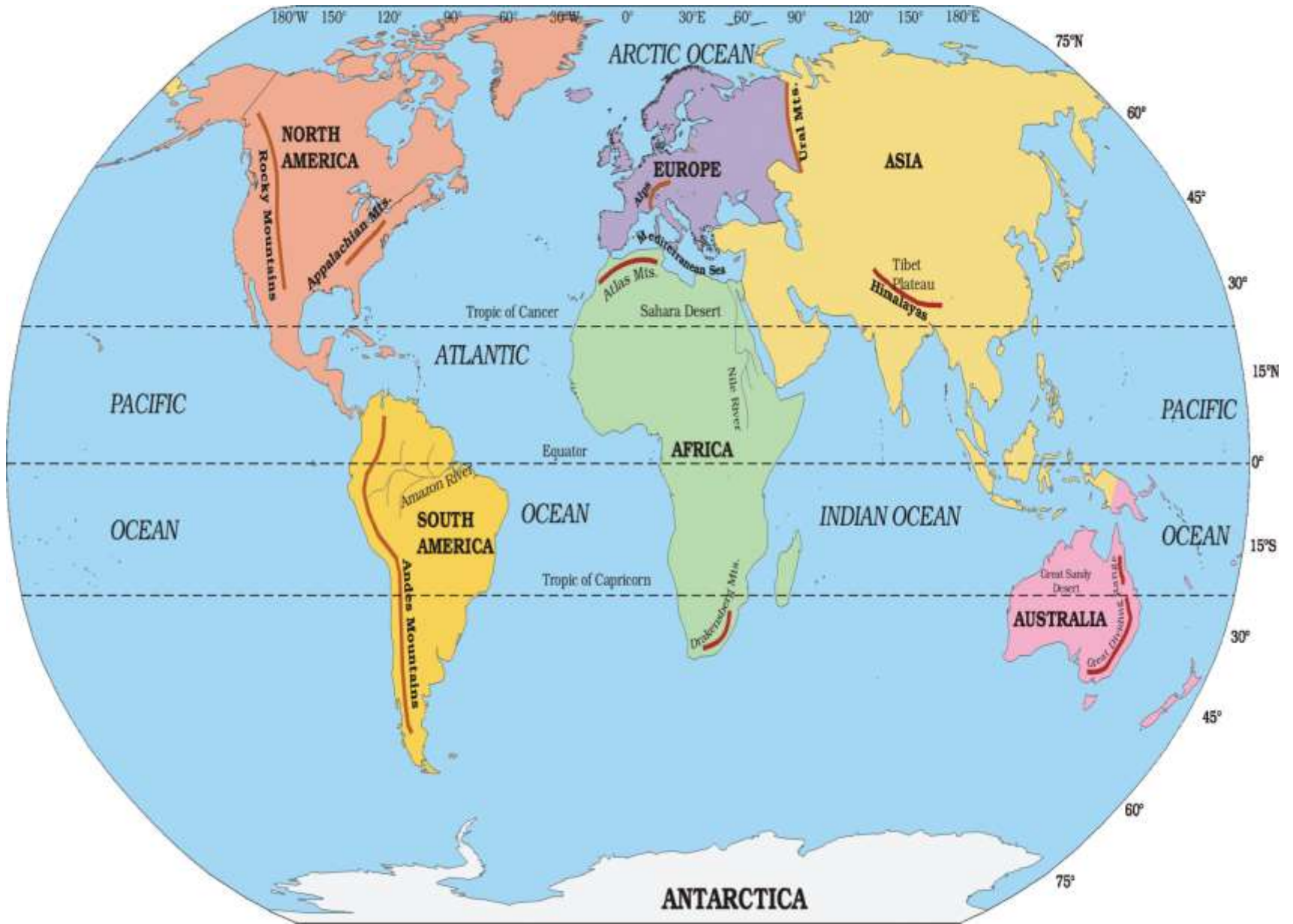
Hydrosphere

- The earth is the only planet which has life. Human beings can live here because the life sustaining elements of land, water and air are present on the earth.
- The surface of the earth is a complex zone in which three main components of the environment meet, overlap and interact.

- The solid portion of the earth on which we live is called the LITHOSPHERE.
- The gaseous layers that surround the earth, is the ATMOSPHERE, where oxygen, nitrogen, carbon dioxide and other gases are found.
- Water covers a very big area of the earth's surface and this area is called the HYDROSPHERE. The Hydrosphere comprises water in all its forms, that is, ice, water and water vapour.
- The BIOSPHERE is the narrow zone where we find land, water and air together, which contains all forms of life.

# LITHOSPHERE

- The solid portion of the earth is called the *Lithosphere*.
- It comprises the rocks of the earth's crust and the thin layers of soil that contain nutrient elements which sustain organisms.
- There are two main divisions of the earth's surface.
- The large landmasses are known as the continents and the huge water bodies are called the ocean basins.
- All the oceans of the world are connected with one another.
- The level of seawater remains the same everywhere.
- Elevation of land is measured from the level of the sea, which is taken as zero.



# Continents

- There are seven major continents.
- These are separated by large water bodies.
- These continents are – Asia, Europe, Africa, North America, South America, Australia and Antarctica.
- The greater part of the land mass lies in the Northern Hemisphere.



# Asia

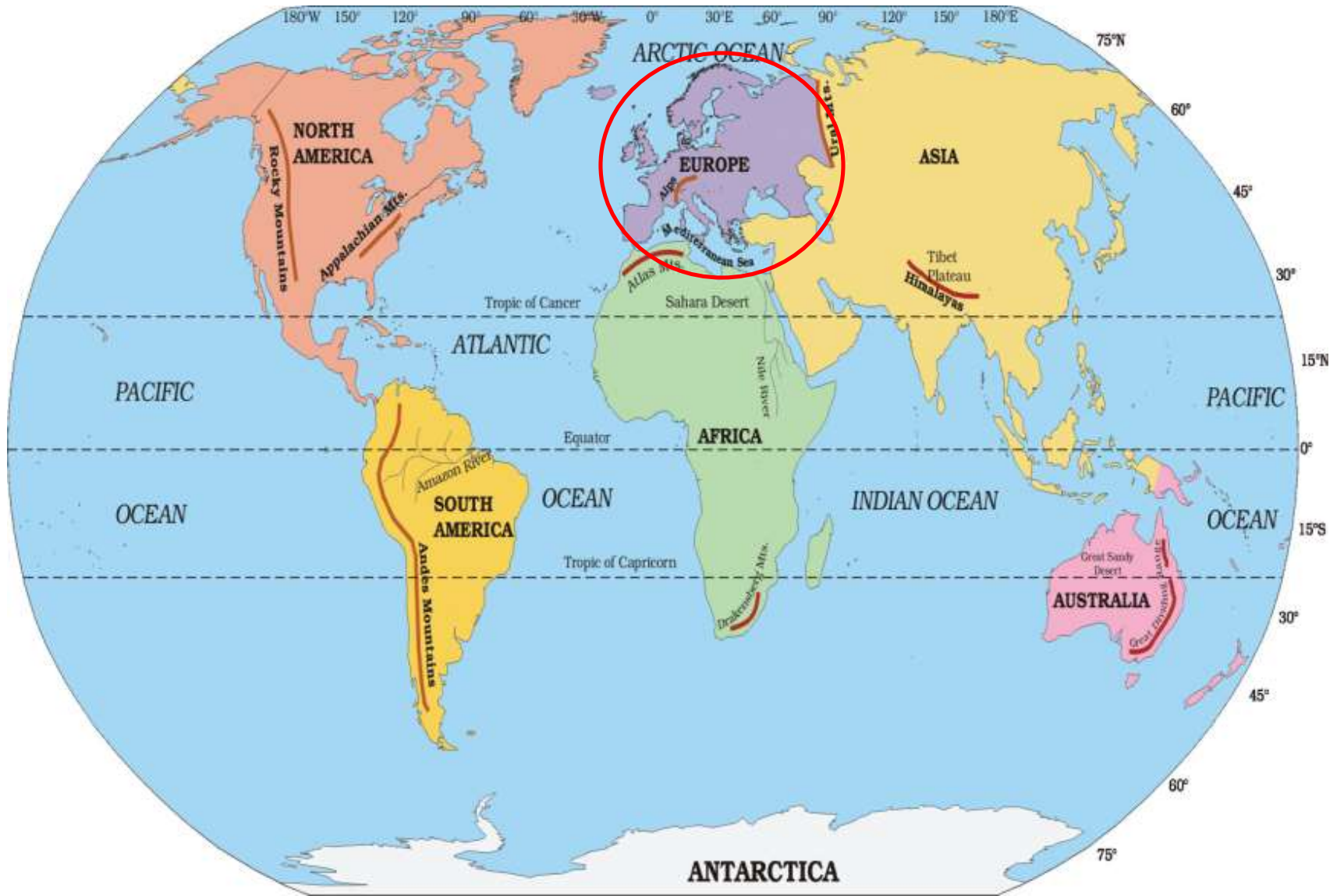
- Asia is the largest continent.
- It covers about one third of the total land area of the earth.
- The continent lies in the Eastern Hemisphere.
- The Tropic of Cancer passes through this continent.
- Asia is separated from Europe by the Ural mountains on the west
- The combined landmass of Europe and Asia is called the *Eurasia (Europe + Asia)*.





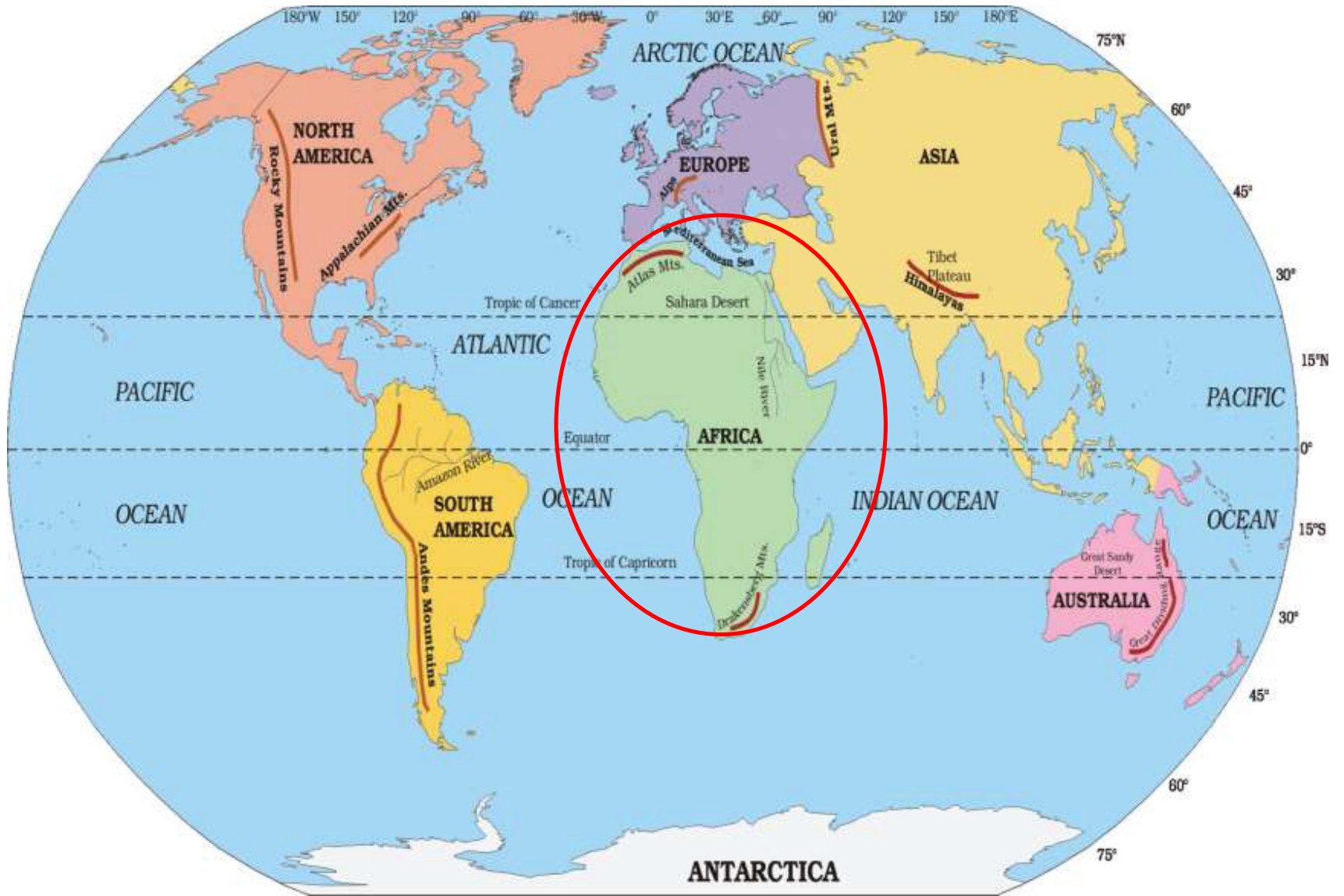
# Europe

- Europe is much smaller than Asia.
- The continent lies to the west of Asia. The Arctic Circle passes through it.
- It is bound by water bodies on three sides.



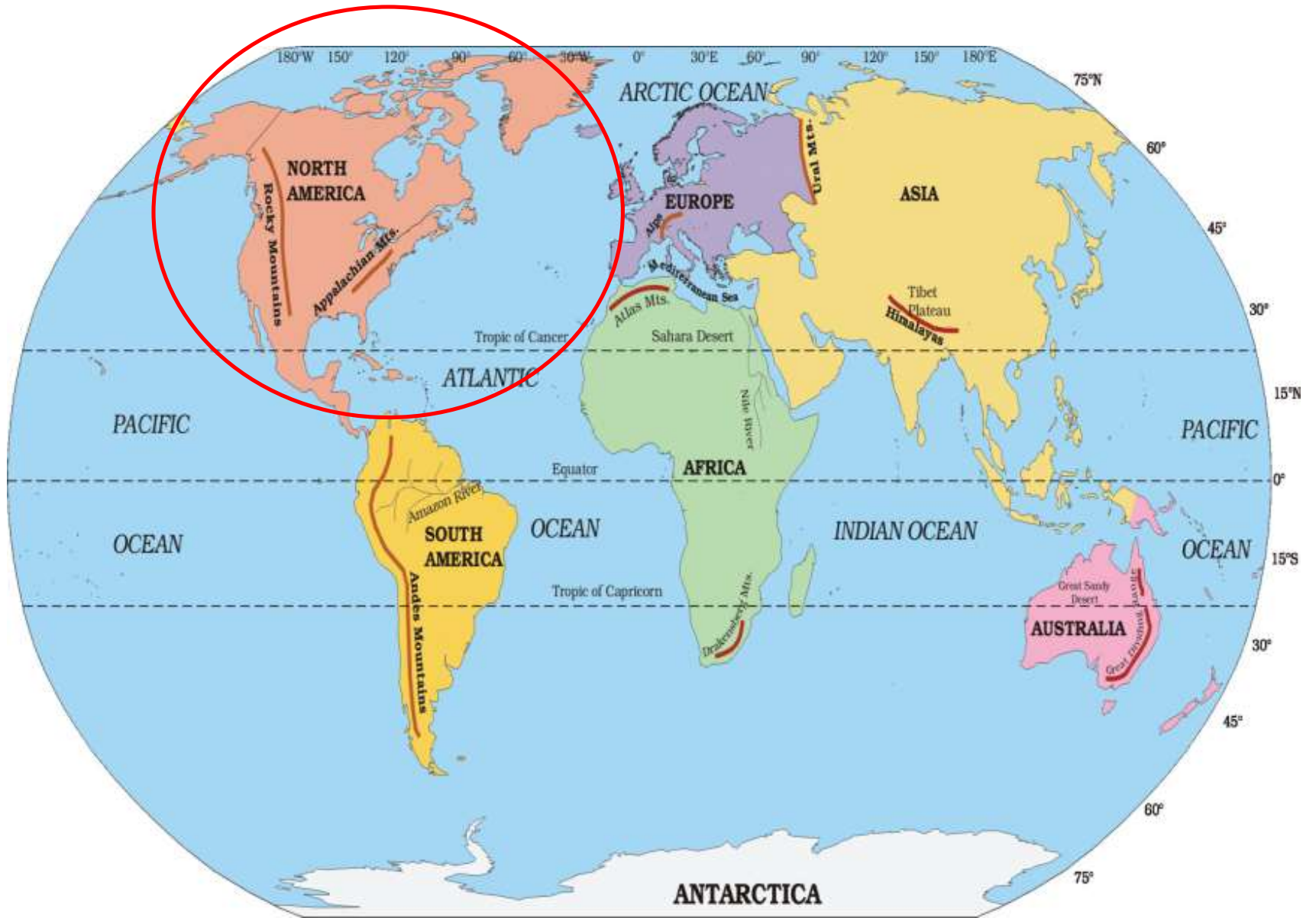
# Africa

- **Africa is the second largest continent after Asia.**
- **The Equator or 0 latitude runs almost through the middle of the continent.**
- **A large part of Africa lies in the Northern Hemisphere.**
- **It is the only continent through which the Tropic of Cancer, the Equator and the Tropic of Capricorn pass.**
- **The Sahara Desert, the world's largest hot desert, is located in Africa.**
- **The continent is bound on all sides by oceans and seas.**
- **The world's longest river the Nile, flows through Africa.**



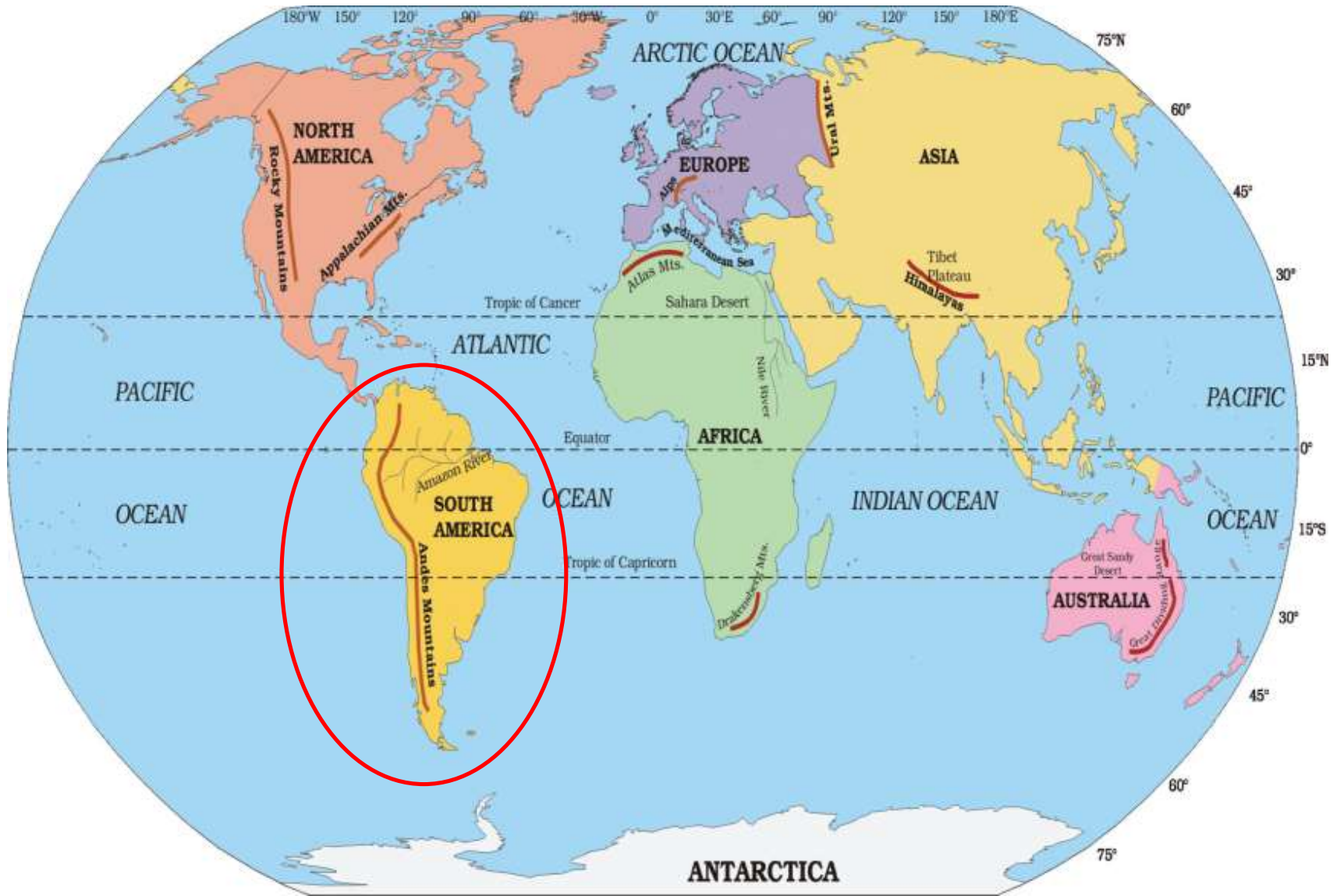
# North America

- North America is the third largest continent of the world.
- It is linked to South America by a very narrow strip of land called the Isthmus of Panama.
- The continent lies completely in the Northern and Western Hemisphere.
- Three oceans surround this continent are the Atlantic Ocean , the Pacific Ocean and the Arctic Ocean.



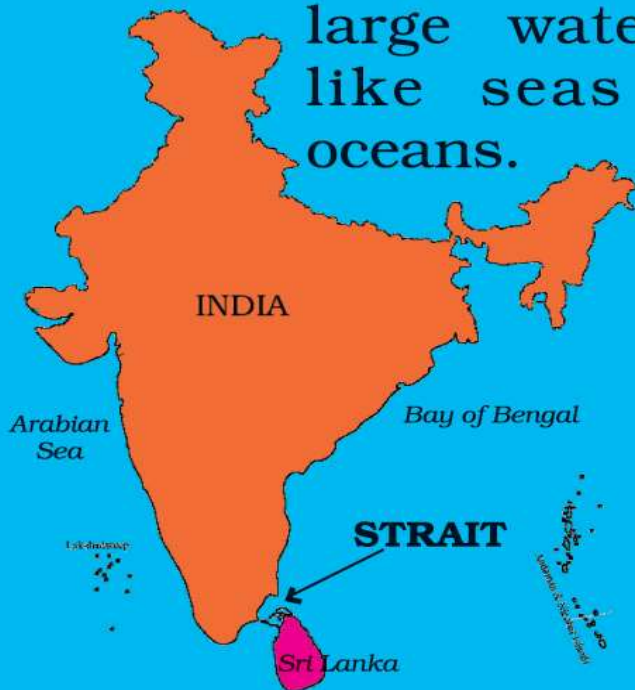
# South America

- South America lies mostly in the Southern Hemisphere.
- The Atlantic Ocean and the Pacific Oceans oceans surround it on the east and the west.
- The Andes, world's longest mountain range, runs through its length from north to south.
- South America has the world's largest river, the Amazon.





A **strait** is a narrow passage of water connecting two large waterbodies like seas and oceans.

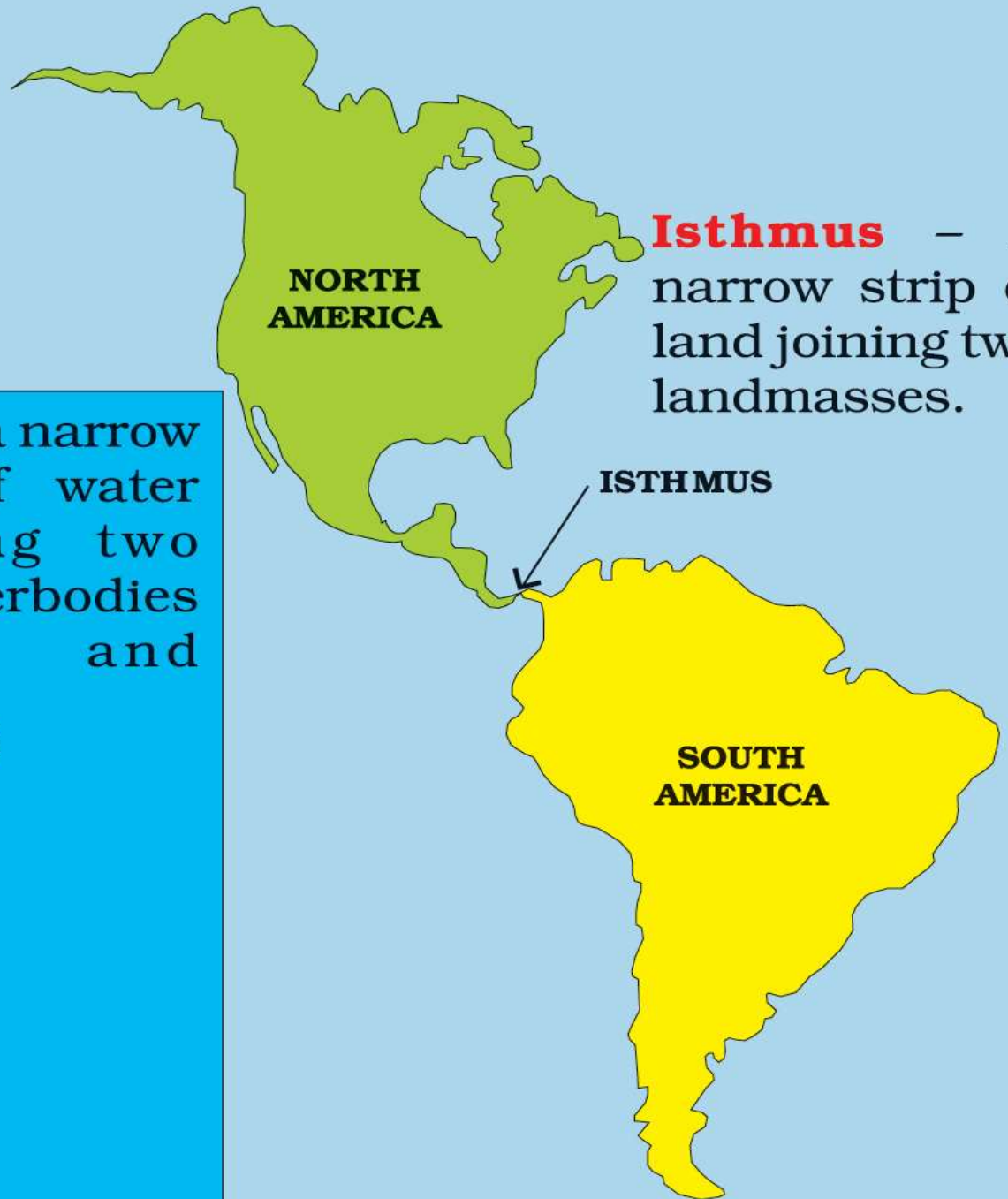


**NORTH AMERICA**

**Isthmus** – A narrow strip of land joining two landmasses.

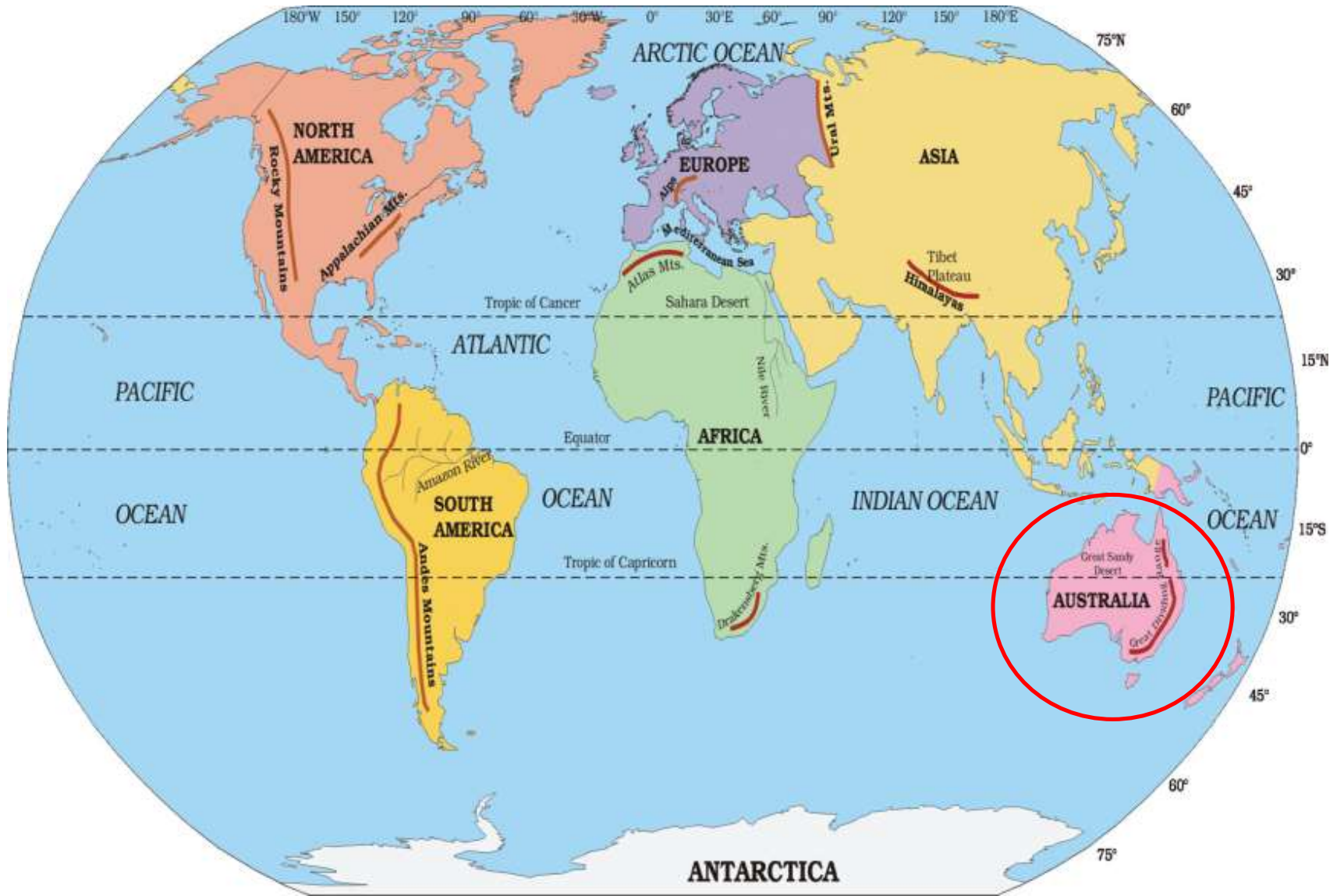
**ISTHMUS**

**SOUTH AMERICA**



# Australia

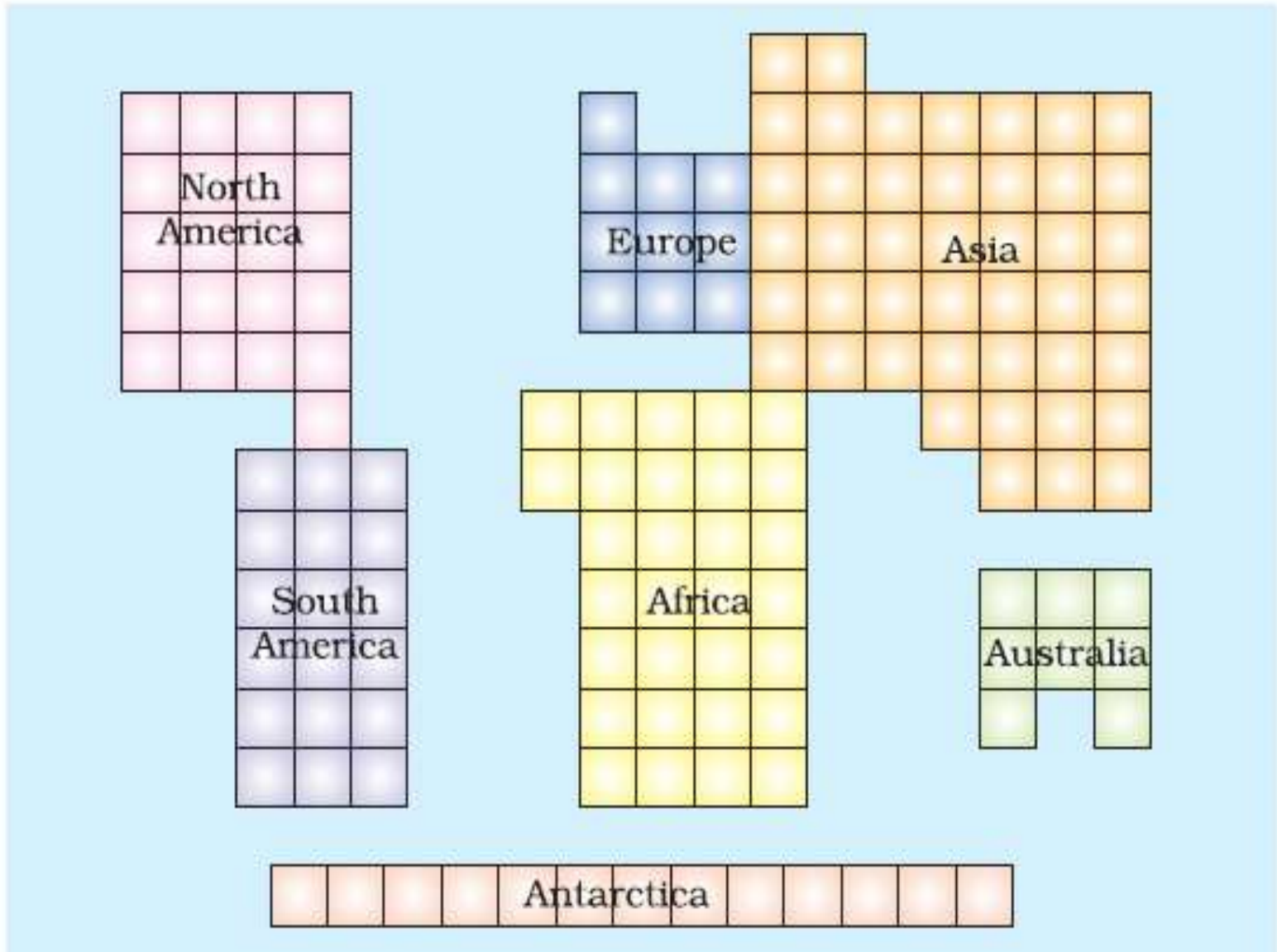
- Australia is the smallest continent that lies entirely in the Southern Hemisphere.
- It is surrounded on all sides by the oceans and seas.
- It is called an *island continent*.



# Antarctica

- Antarctica, completely in the Southern Hemisphere, is a huge continent.
- The South Pole lies almost at the centre of this continent.
- As it is located in the South Polar Region, it is permanently covered with thick ice sheets.
- There are no permanent human settlements.
- Many countries have research stations in Antarctica.
- India also has research stations there. These are named as Maitri and Dakshin Gangotri.





*Comparative size of the continents*

**Thank you ...**