

..... GEOGRAPHY AND HISTORY.....

YEAR 1, PART 1

Contents



01 Our planet Earth

02 The representation of the Earth: maps

03 The Earth's relief

04 Rivers and seas

05 Weather and climate

06 Climates and landscapes of the Earth

07 Society and the environment



1. The outer layer of the Earth

2. Internal forces in the formation of relief

3. External forces in the formation of relief

4. The continents

5. The Earth's relief

6. Europe's relief

7. Spain's relief





- On our planet, the land is separated into large landmasses known as **continents**.
- There are **six continents** on Earth: Africa, America, Asia, Europe, Oceania and Antarctica.
- The continents have different kinds of relief, including **plains**, **plateaus**, **mountain ranges**, **valleys** and **basins**.
- The continents are surrounded by oceans that produce **beaches**, **cliffs**, **gulfs**, **peninsulas** and **capes**.
- Groups of **islands** in the middle of the sea are known as **archipelagos**.

1. The outer layer of the Earth



1.1. The structure of the Earth

- The structure of the Earth

1.2. The Earth's crust

1.3. Continental drift

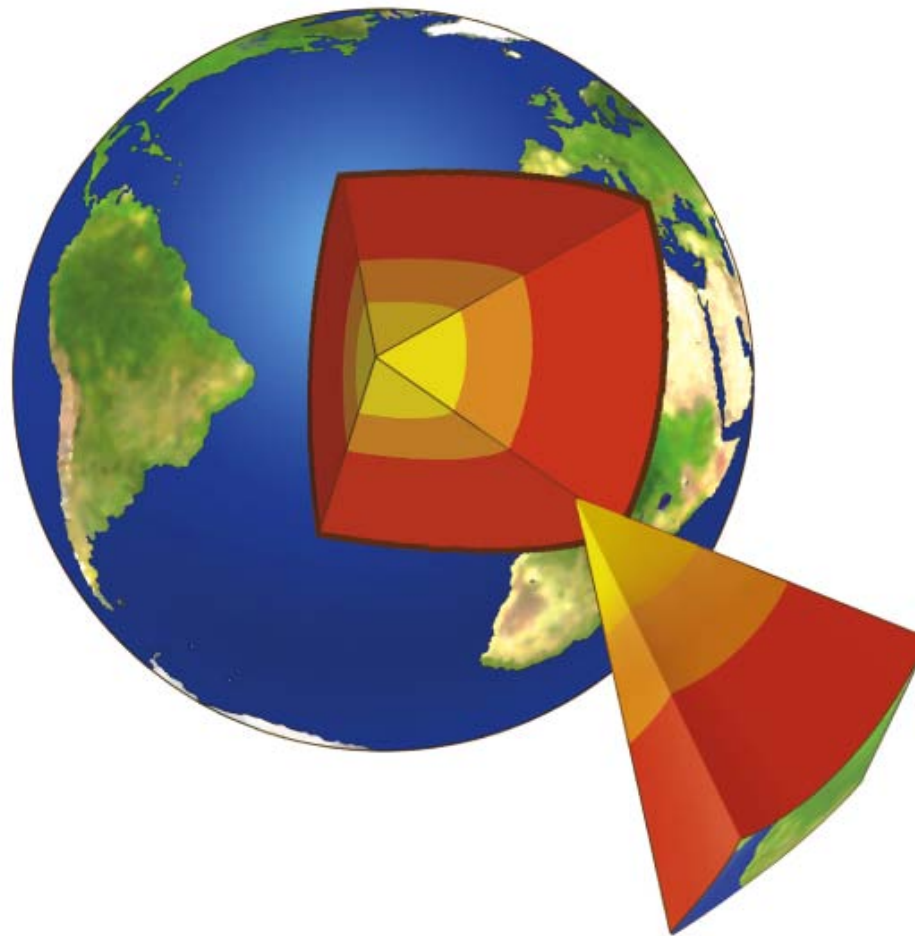
- Continental drift

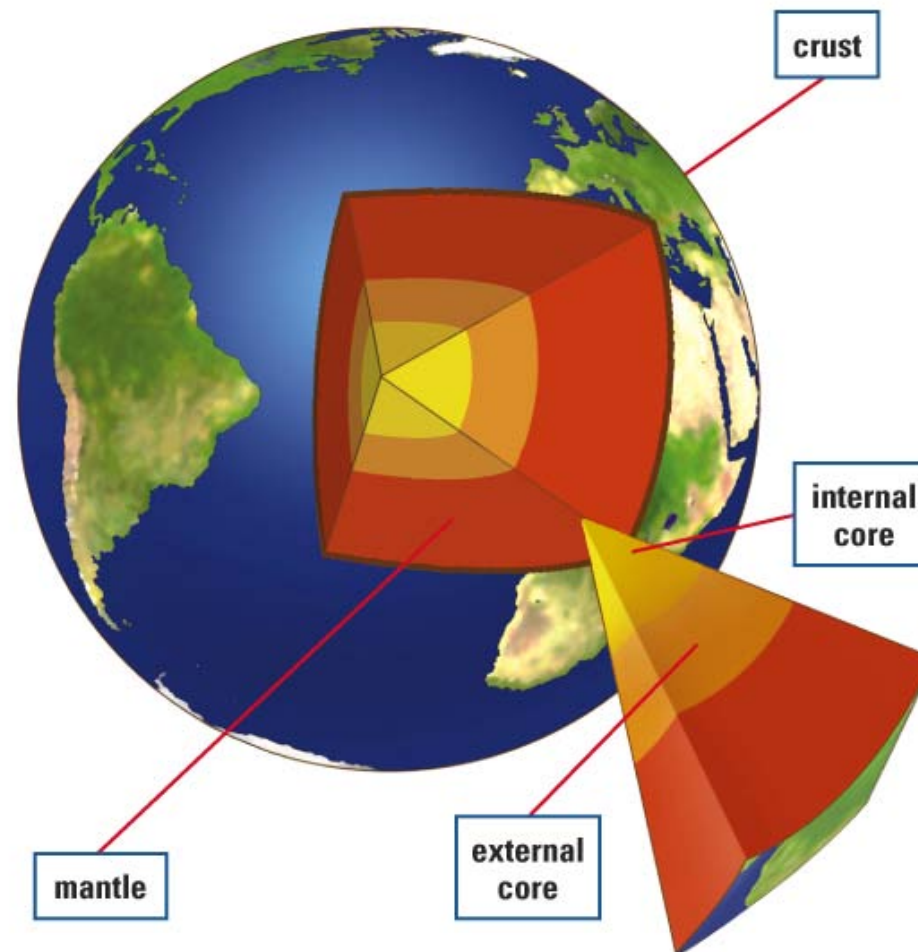


1.1. The structure of the Earth



- The **Earth** is a huge **sphere** which can be divided into three sections: the core, the mantle and the crust.
- The **core** is the deepest part and makes up 15% of the Earth's volume.
- The **mantle** surrounds the core and makes up 84% of the Earth's volume.
- The **crust** is the outer layer and makes up 1% of the Earth's volume.





1.2. The Earth's crust



- The **Earth's crust** is thicker in some places, forming the continents. It is thinner in some places, and lies under the oceans.
- The Earth's crust is not flat. It forms the mountains, valleys, basins and plains that make up the Earth's **relief**.
- The Earth's relief is always changing because of the action of **internal** and **external forces**.
- External changes to relief are caused by the action of water, wind or humans.

1.3. Continental drift



- **Continental drift** is the theory that 200 million years ago there was a single continent called **Pangea** on the Earth which moved and broke up.
- **Tectonic plates** are the huge pieces of rock produced when this continent broke up.
- When two plates collide, one can rise and form a **mountain range** and the other can sink under the ocean and form an **oceanic trench**.
- The places where plates meet can produce **volcanoes** and **earthquakes**.



A. 200 million years ago



B. 65 million years ago



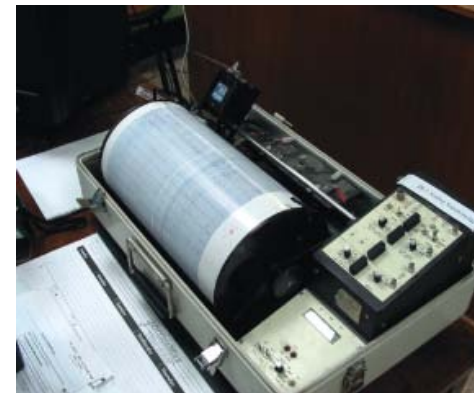
C. The continents today

2. Internal forces in the formation of relief



2.1. Internal forces

- Causes and effects of an earthquake
- Structure of a volcano

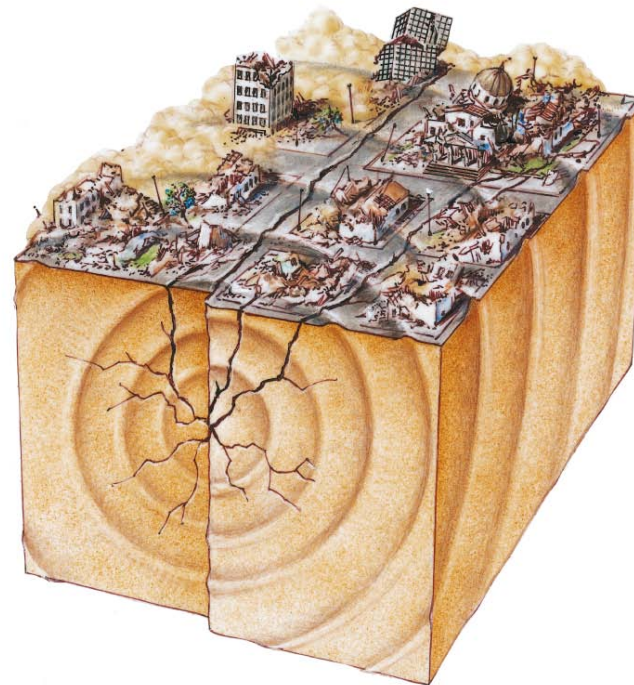


2.1. Internal forces

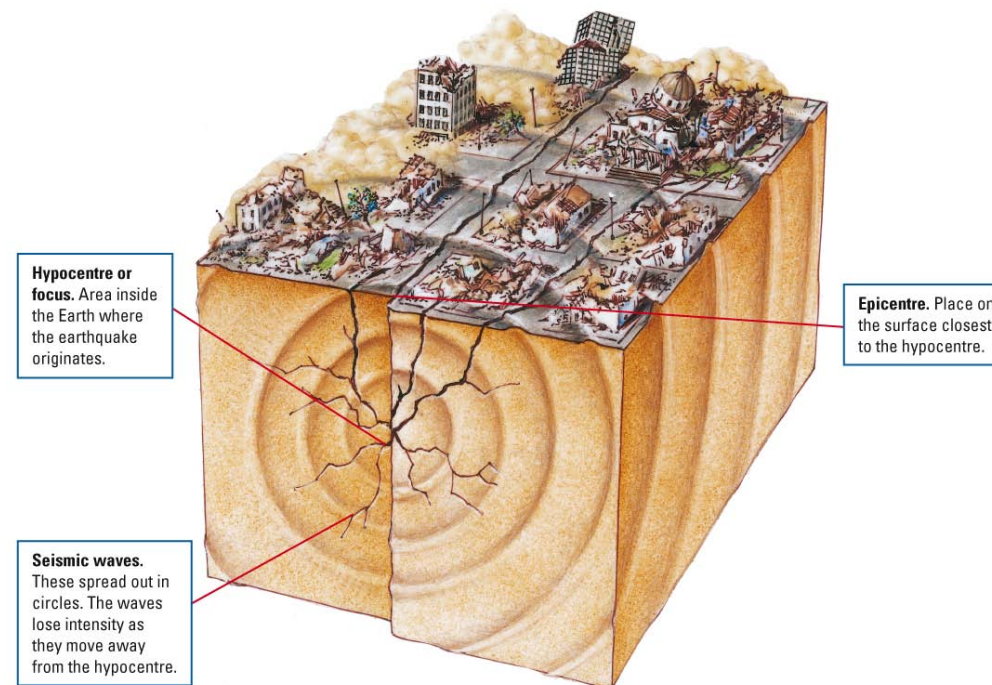


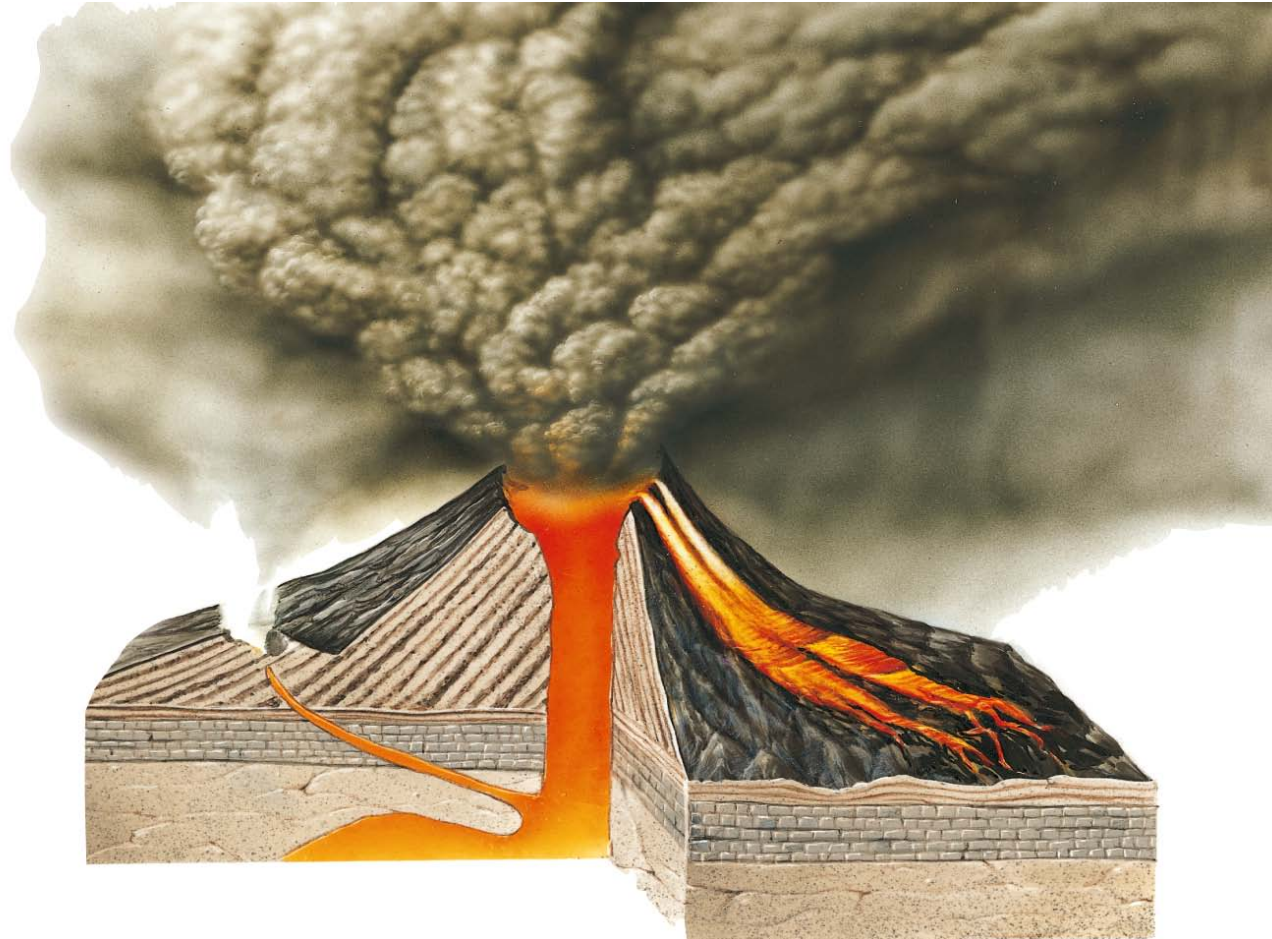
- The **internal forces** of the Earth cause **earthquakes** and **volcanoes**.
- **Earthquakes** are the result of vibrations, or **seismic waves**.
- **Volcanoes** are cracks in the Earth's surface. Pressure forces **magma** to the surface through these cracks.
- During a **volcanic eruption**, gases, ash, rocks and lava are expelled. When these materials cool, they form the volcano's **cone**.

Causes and effects of an earthquake

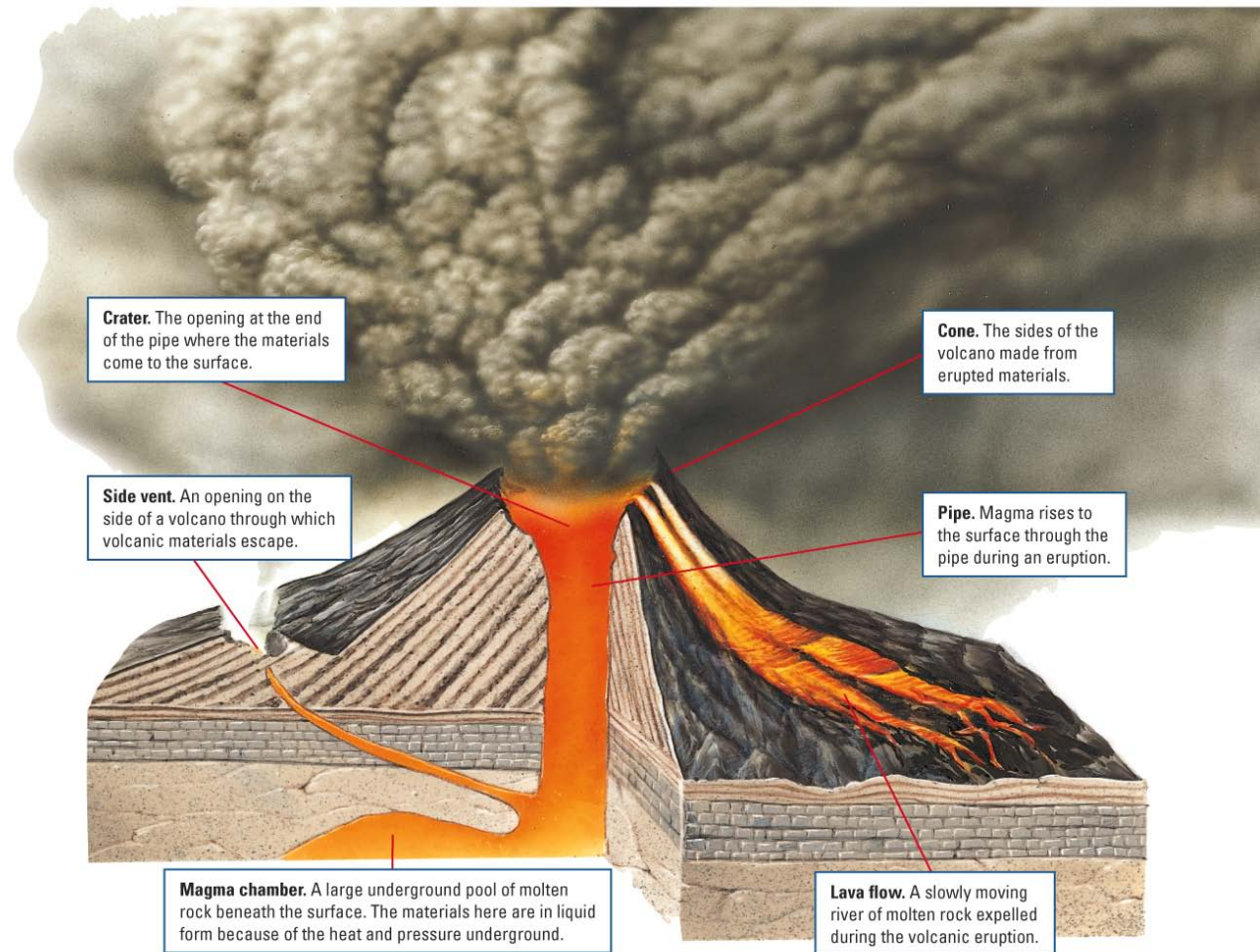


Causes and effects of an earthquake





Structure of a volcano



3. External forces in the formation of relief



3.1. External forces



3.1. External forces in the formation of relief



- Relief is not only the result of movements inside the Earth, but also **external forces**, such as water or wind.
- **Water** is the main external agent acting on the land. The effects of rain, ice, waves, tides and marine currents can be intense and diverse.
- **Wind** erodes rock and transports small particles, such as sand and dust, to other places.
- The roots of **trees** penetrate the ground and can split rocks. They can also hold the soil and rocks in place.

4. The continents



4.1. The division of the world into continents

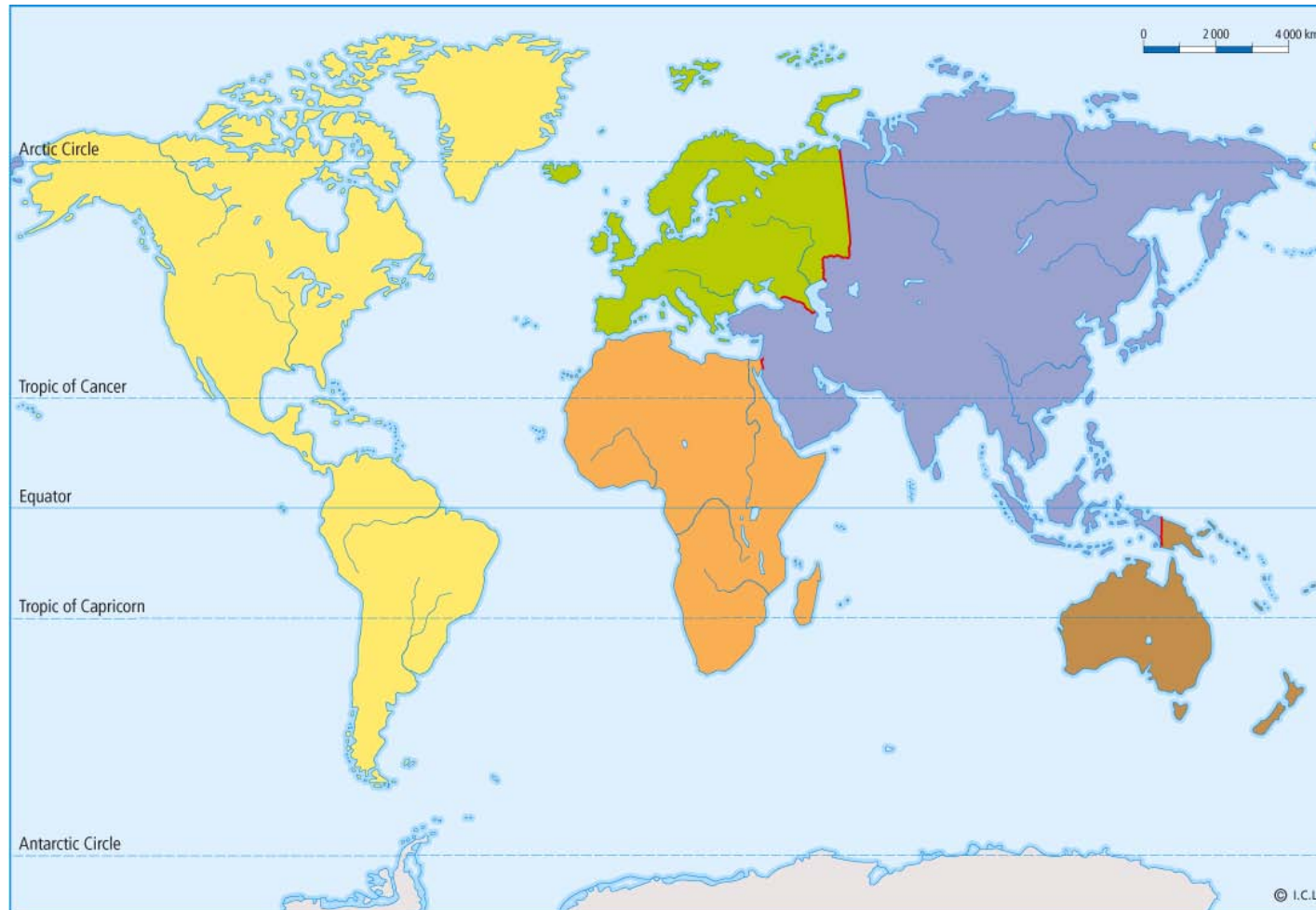
- Continents and oceans



4.1. The division of the world into continents



- **Continents** are enormous landmasses separated by oceans.
There are six continents:
- **Africa**
- **America**
- **Asia**
- **Europe**
- **Oceania**
- **Antarctica**



Continents and oceans





5.1. The relief of the continents

- The relief of the continents

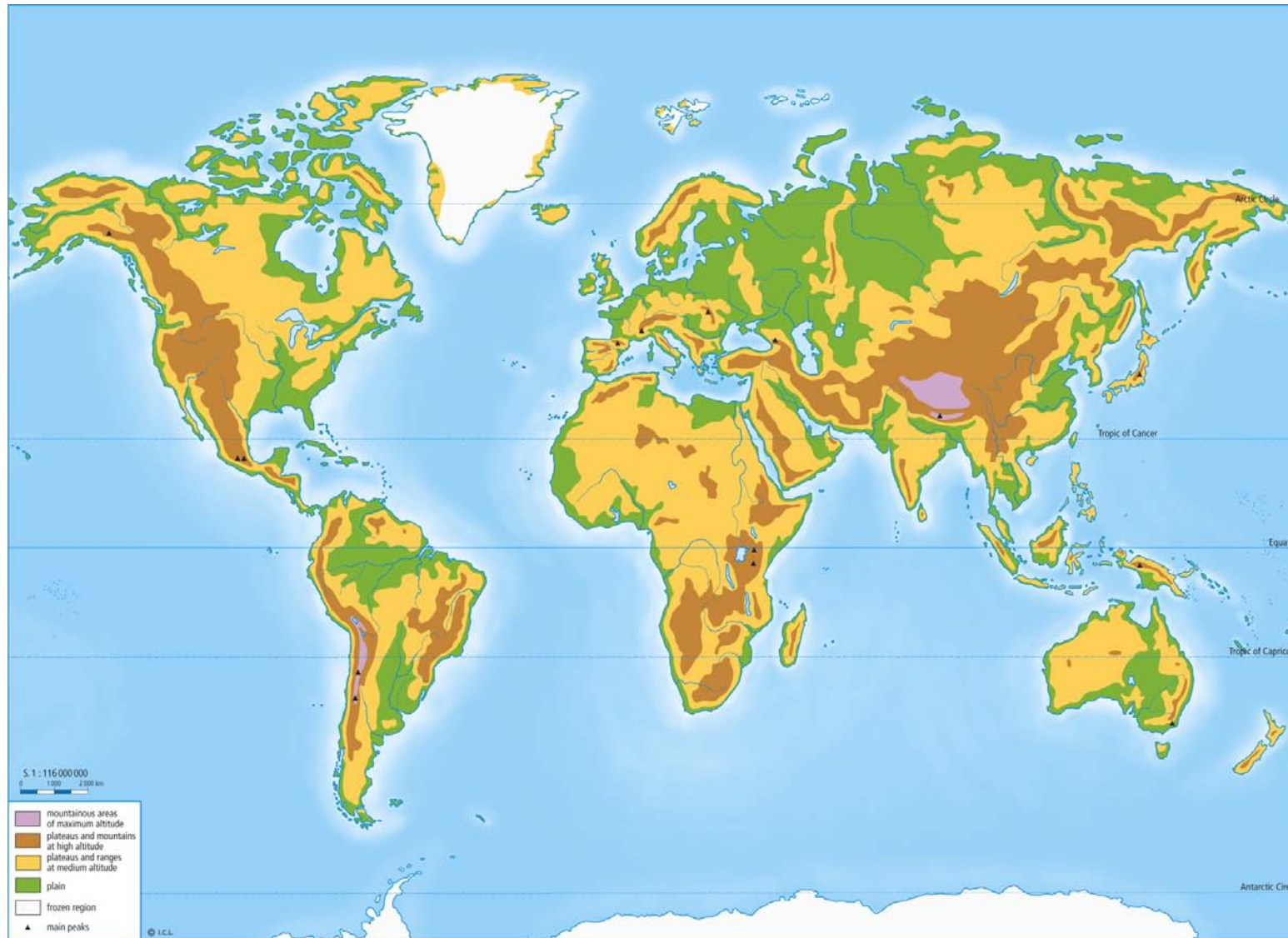


5.1. The relief of the continents



- The surface of the continents is not smooth or uniform. The **relief** includes:
- **mountains**
- **plains**
- **plateaus**
- **valleys**

The relief of the continents



The relief of the continents





6.1. The European continent

- The European continent

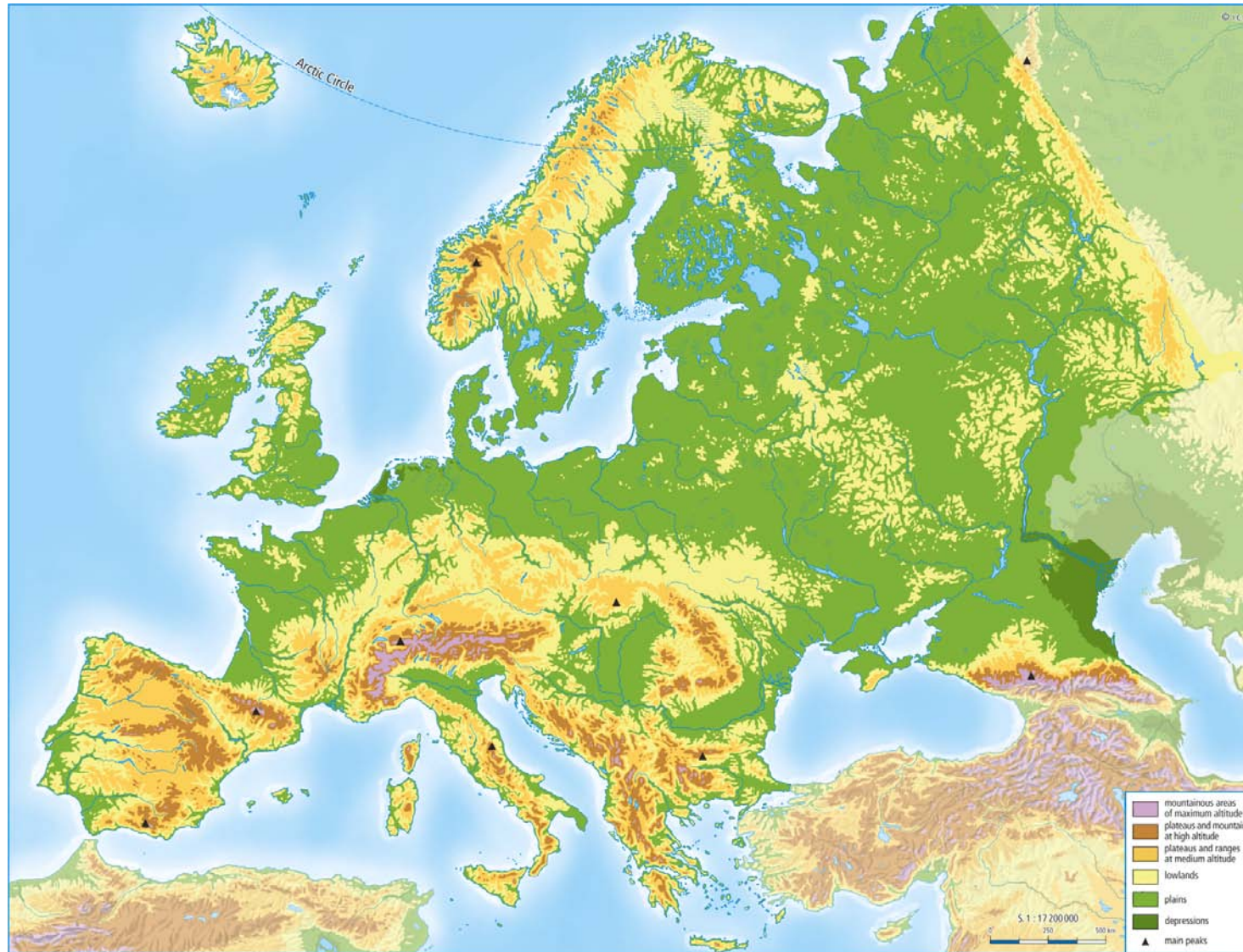


6.1. The European continent



- **Europe** is a small continent.
- Europe is a peninsula of the larger Eurasian continent and it is surrounded by different oceans and seas.
- There are three main features of relief in Europe: the **Great European Plain**, the **plateaus** and **old mountain ranges** and the **young mountain ranges**.

The European continent



The European continent





7.1. The relief of the Iberian Peninsula

7.2. The relief of the archipelagos

- The relief of Spain

7.1. The relief of the Iberian Peninsula



- The **Iberian Peninsula** is in the south-west of Europe.
- The **Meseta** is the central feature of relief on the peninsula. The **Sistema Central** and the **Montes de Toledo** are in its interior.
- The **coasts** are high and regular, interrupted by large stretches of sandy coastline.

7.2. The relief of the archipelagos



- The relief of the **Balearic Islands** can be considered a continuation of the peninsula.
- The relief of the **Canary Islands** is hilly and of volcanic origin.

The relief of Spain



The relief of Spain

