AN INTRODUCTION TO GEOGRAPHY

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1. What is Geography?

Geo: Earth	Graphy: writing

"writing about the Earth"

Geography is the science that explains and analyzes the terrestrial space and the relationships that occur between the human being and the environment.

Why do we say that Geography is a social science?

Because it is a **science at the service of people**, which allows us to know the space we inhabit, its resources, its limits, its possibilities, contributing to a sustainable development of the natural and cultural patrimony.

What more social sciences do you know?

History, Economics,…

Divisions of Geography

Regional Geography is the branch of the geography that studies the features that distinguish the different contries or regions of the world

General Geography is the branch of the geography that tries to establish general principles from the analysis of the great aspects that affect the planet in a global way.

Divisions of Geography

Physical Geography is the branch of geography dealing with the natural features of the Eart.

Study:
Landscapes
Water
Climates
Vegetation
….

Human Geography is the branch of geography dealing with human culture and its impact on the Earth.

Study:
Economic activities
Territorial organisation
Population
Urban areas
…

Divisions of Geography: examples

- If I'm studying the type of the climate at the poles,
I am doing a study of Geography ….???

- Regional physical

- If I'm doing a study about the population in the USA,
I am doing a study of Geography ….???

- Regional human

- If I'm studying Spanish relief,
I am doing a study of Geography ….???

- Regional physical

- If I'm studying democratic states,
I am doing a study of Geography ….???

- General human

2. What is Geography for?

- Locate and describe physical elements
- Understand and explain human problems
- Connect elements with difference features
- Appreciate natural and cultural patrimony

And, if all this doesn't convince you…
Geography will allow you to promote to the last year of Secondary Education,
as long as you pass,
of course!!!

3. Geographic tools

GLOBE

MAPS

GRAPHICS

PHOTOGRAPHY

STATISTICS

3. Geographic tools: globe

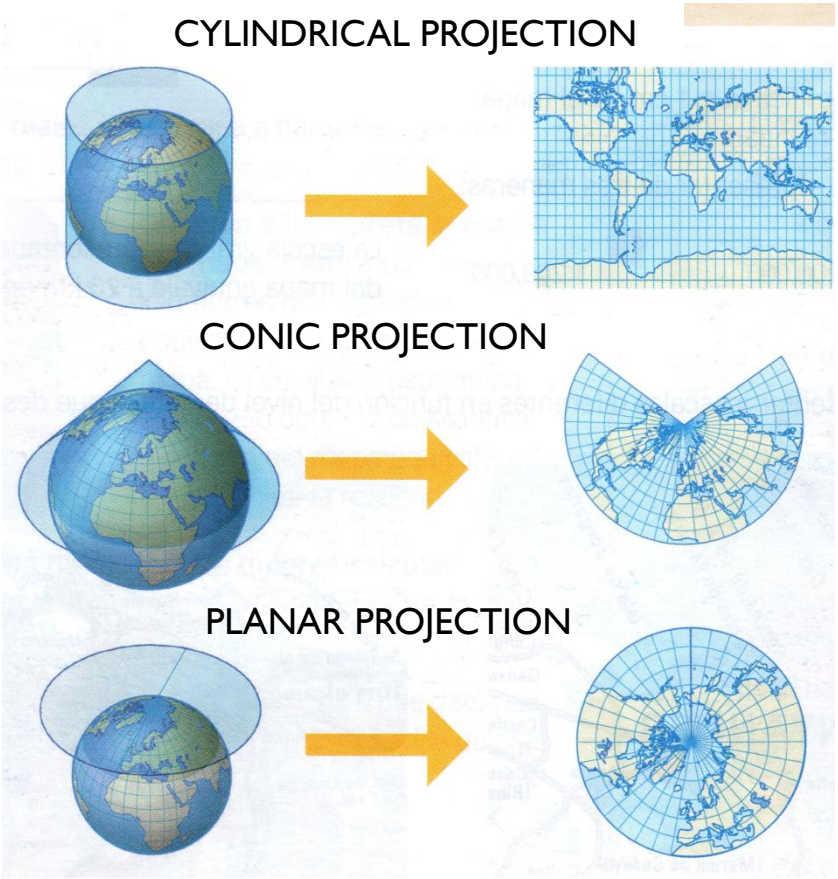
It is the best way to represent the Earth because distances, and size of continents are showed without distortions.

However, a globe isn't transported easily and doesn't allow us to observe the whole Earth's surface at the same time.

3. Geographic tools: maps

They are flat representations of the Earth's surface. As our planet is spherical, we use several types of projections such as planar, cyilindrical and conic.

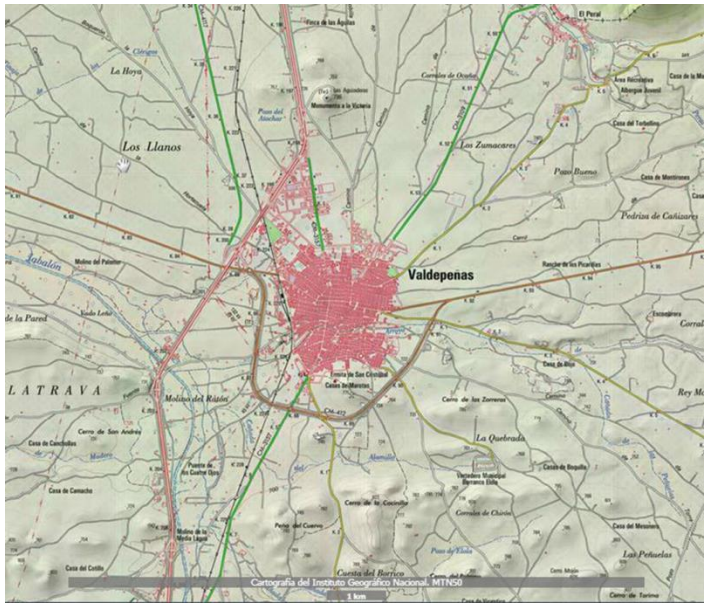
However, distances, shapes and size of continents are distorted.

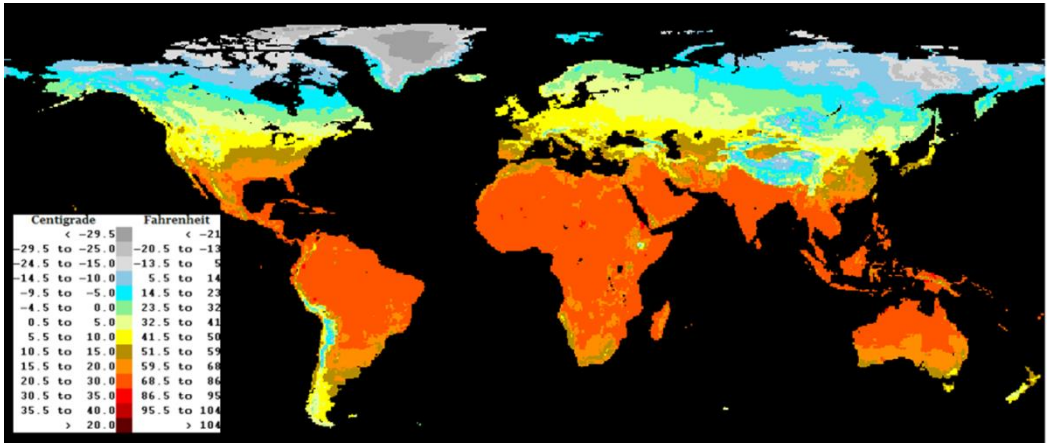


3. Geographic tools: types of maps

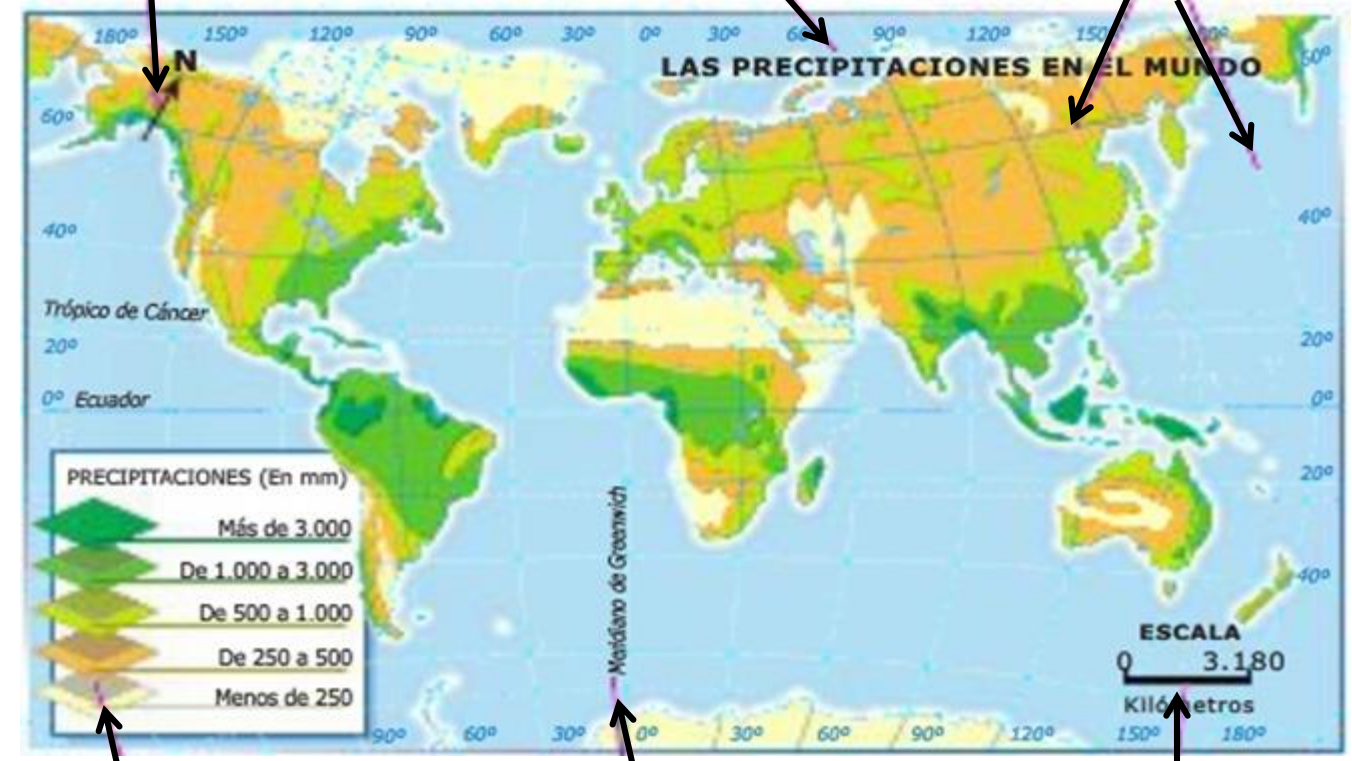
There are two main types of maps:

- **Topographic maps** show the main features of the natural environment, like mountains and rivers. They also include man-made features, such as cities and roads.
- **Thematic maps** provide visual information on a particular subject, for example climate or population.





3. Geographic tools: elements of maps



3. Geographic tools: elements of maps: key

The legend of a map are symbols (points, colors, lines and drawings) that explain the information that the map collects.

It appears in the lower left or right corner of the map.

The symbols should be clear and simple. For instance, the water in blue, forests in green or roads in red.

Imagine that you are ordered to make the map of a locality and you are designing the legend.
How would you represent a hospital, a church, a park, a football pitch, an airport, a school, a lake and bus station?

A park

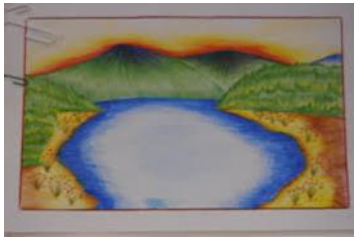
A hospital

A school

An airport

A church

A lake



A football pitch

A bus station

3. Geographic tools: elements of maps: scale

It is the mathematical relationship between the current size of an object or area and the size shown on the map and it can be numerical or linear.

NUMERIC SCALE

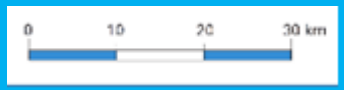
It is a fraction. The numerator represents a unit on the map and the denominator represents size on the land.

1
---------- 1/1.000.000 1: 1.000.000
1.000.000

1 cm on the map = 1.000.000 cm on the land = 10 km

GRAPHIC SCALE

It is expressed by a line divided into equal segments, usually 1 cm.



1 cm on the map = 10 km on the land

3. Geographic tools: elements of maps: scale

Depending on scale we can difference:

Large scale maps: Includes a little territory but has more detail. Example: a city.

1: 1.000

1: 50.000

Small scale maps: Includes a big territoriy but has less detail. Example: a continent

1: 200.000

1: 50.000.000

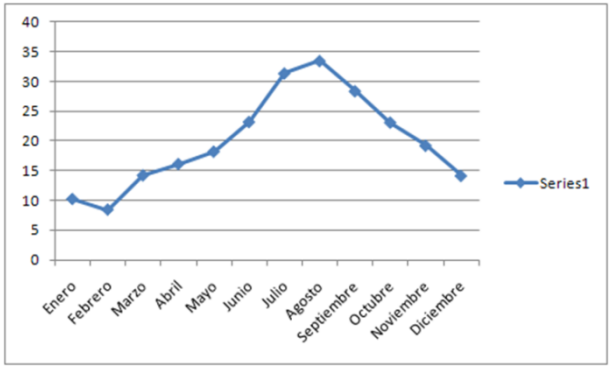
3. Geographic tools: graphics

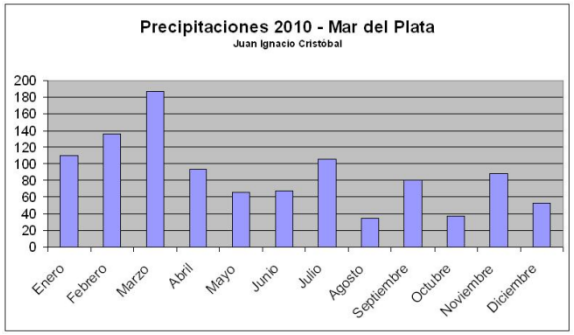
It is a representation of numerical data. Geographers use them to visualize the results of their studies. It allows us to see the evolution of a data in the time better, as well as the relations between several aspects.

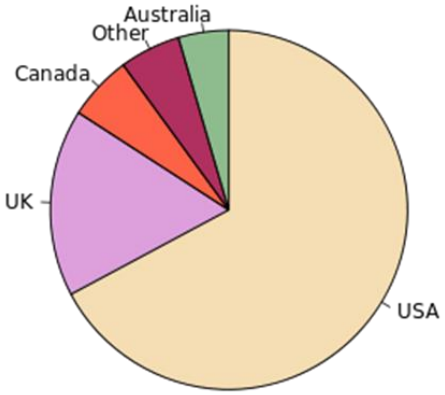
Line graphic
It is used to reflect the evolution of a piece of information (datum) during a period of time.

Bar graphic
It is used to compare a fact between different places, periods or categories.

Sector graphic
It is used to represent a distribution.







3. Geographic tools: photography

It offers a vision of reality and not a representation. They serve to study a specific fact (a landscape) or to analyze a process by comparing images in different periods (environment deteroration).

Traditional photograph
Shows a little area but with a lot of detail.

Aerial photograph
Shows a bigger territory but with less detail.

Satellite photograph
Shows a huge place but without detail.