

# GEOGRAPHY AND HISTORY 1<sup>st</sup> ESO \_\_\_\_\_

## CLIMATIC ELEMENTS AND FACTORS

### Vocabulary:

Surface	Tend to	Wet	However	Weather	Degree
Cloud	Dry	Both	Depression	Scarce	Hail

1. Tiempo \_\_\_\_\_
2. Tender a \_\_\_\_\_
3. Ambos \_\_\_\_\_
4. Sin embargo \_\_\_\_\_
5. Escaso \_\_\_\_\_
6. Grado \_\_\_\_\_
7. Granizo \_\_\_\_\_
8. Nube \_\_\_\_\_
9. Superficie \_\_\_\_\_
10. Seco \_\_\_\_\_
11. Borrasca \_\_\_\_\_
12. Húmedo \_\_\_\_\_

### **Read the following text:**

#### Climate and weather

Climate and weather are two typical words that we usually use as a part of our daily conversations. We tend to use both words as synonyms to describe the state of the atmosphere. However, there are some differences between the meaning of climate and weather.

Weather is the specific condition of the atmosphere in a particular place and time. It makes reference to what is happening in that precise moment: it is sunny, it is cold, it is rainy, it is windy, etc. The weather can be an example of the typical situation of the atmosphere in a place, but it also can represent an exceptional situation.

Climate is the typical and usual condition of the atmosphere in a particular place during a long period of time that it is repeated cyclically. It makes reference to what normally happens in a place during the different seasons of the year: this city has very hot summers with high temperatures, the desert is a very dry area with scarce precipitations, etc.

#### Climatic elements and factors

To describe and explain how and why is the climate of a geographic area, we use climatic elements and factors. Climatic elements are the characteristics that we use to describe how is a climate (temperature, rain, pressure, humidity and wind). Climatic factors are the reasons that we use to explain why a climate is like it is (latitude, altitude, distance to sea).

- Temperature
  - Temperature is the degree of heating of the air of the atmosphere. Temperature is measured using an instrument called thermometer, it is expressed using degrees (°) and it is represented in the maps using a type of lines called isotherms.

- Temperature is influenced by latitude (temperatures are higher if we are close to the Equator), altitude (temperatures go down 6° degrees every 1000 meters of altitude) and distance to sea (the sea regulates and stabilize temperatures).
- Precipitations
  - Precipitations are the fall of water in different states (rain, snow, hail) from the atmosphere to the surface of the Earth. Precipitations are measured using an instrument called pluviometer, are expressed using millimeters (mm) and are represented in the maps using a type of lines called isohyets.
  - Precipitations are influenced by latitude (precipitations are higher if we are close to the Equator), altitude (precipitations are more abundant if we go up) and the distance to sea (precipitations are more abundant if we are close to the sea because is the place where clouds are created).
- Pressure
  - Pressure is the weight of the air of the atmosphere over the surface of the Earth. Pressure is measured using an instrument called barometer, it is expressed using millibars (mb) and it is represented in the maps using a type of lines called isobars.
  - Pressure has a great influence on weather, modifying the risk of precipatitons. High pressure, also known as anticyclones (more than 1013 millibars), cause stable and dry weather with minimum risk of precipitations. Low pressure, also known as depressions (less than 1013 millibars), cause unstable and wet weather with maximun risk of precipitations.
- Humidity
  - Humidity is the amount of water particles in the air of the atmosphere. Humidity is measured using an instrument called hygrometer, it is expressed using percentages (%) and it is represented in the maps using a type of lines called isohumids.
- Wind
  - Wind is the movement of the air of the atmosphere. Wind is measured using an instrument called anemometer, it is expressed using kilometers per hour (km/h) and it is represented in the maps using a type of lines called isotachs.

1) Complete the following table about the climatic elements using the information in the text:

CLIMATIC ELEMENT	INSTRUMENT OF MEASUREMENT	UNIT OF EXPRESSION	LINES IN MAPS


2) Look at the following pictures and describe the instrument of measurement for climatic elements that is represented in each of them. Follow the example:

**INSTRUMENT 1**



This picture represents an anemometer. It is an instrument used to measure wind. Wind is expressed using kilometers per hour (km/h). Wind is represented in the maps using a type of lines called isotachs.

**INSTRUMENT 2**



**INSTRUMENT 3**



**INSTRUMENT 4**



**INSTRUMENT 5**



**3) The weather vocabulary: Translate in Spanish**

**The Weather**

 sun - sunny	 cloud - cloudy	 partly cloudy	 rain - rainy
 snow - snowy	 sleet - sleeting	 storm - stormy	 lightning
 thunder	 hail - hailing	 wind - windy	 fog - foggy
 ice - icy	 tornado	 rainbow	 clear sky
 hot	 warm	 cold	 freezing

Your  nline English Class - <http://labmat.com.pt/bri>