

Elements of weather and climate

- a) **Temperature** is how hot or cold the atmosphere is. It can be freezing, cold, cool, temperate, warm and hot.
- b) **Humidity** is the amount of water vapour in the atmosphere.
- c) **Precipitation** is all water that falls from the air to the ground. Precipitation includes snow, hail and rain.
- d) **Atmospheric pressure (or air pressure)** is the weight of air on the earth's surface. Pressure is shown on a weather map with lines called **isobars**.) and state of the sky can be sunny, sunshine, cloudy, clear sky and overcast.
- e) **Wind** is the movement of air masses on the earth's surface. It can be calm, breeze, moderate wind, strong wind, hurricane, tornado

Measuring the weather

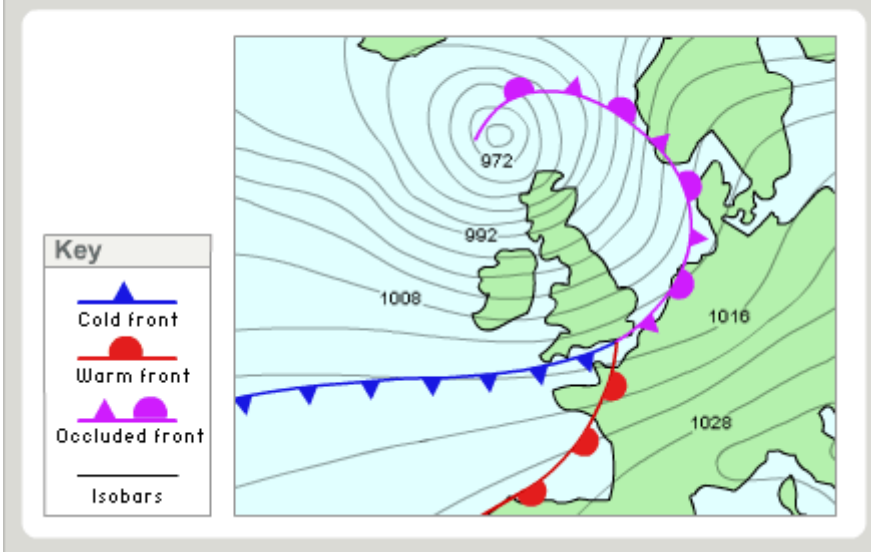
Weather stations are places where a variety of instruments are used to measure the weather elements. The most important instruments used in a weather station are:

- **Hygrometers** are special thermometers that measure **humidity** by calculating the amount of water vapour in the air in %.
- **Rain gauges or pluviometers** measure rainfall or any other form of **precipitation**. Levels of rainfall are measured in millimetres (mm).
- **Barometers** are used to measure **atmospheric pressure** in millibars (mb).
- **Maximum and minimum thermometers** measure the highest and lowest **temperature** in degrees celsius. From the lowest temperatures to the highest temperatures, you can use these adjectives: **freezing** (below 0°C)<**cold**<**cool** <**temperate**<**warm**<**hot**.
- **Wind vanes** are used to show the direction of the **wind** (North, South, East and West) and **Anemometers** are used to measure the wind speed in km/h. From the gentle winds to the strongest winds you can distinguish: **calm**<**breeze**<**moderate wind**<**strong wind**<**hurricane**.

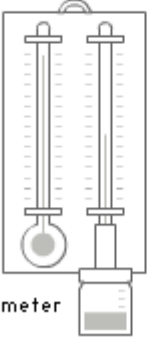
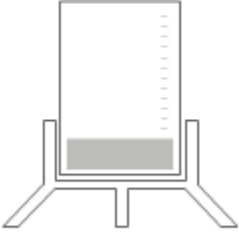

Making a mural about the weather instruments:

Measuring the weather	Definition	Instruments	Measure unit	Picture
Precipitation				
Temperature				
Atmospheric pressure				
Wind				
Humidity				

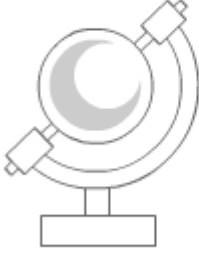
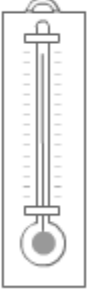
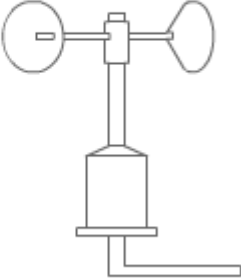
Isobars show atmospheric pressure



Weather station instruments

Humidity	Precipitation	Pressure
 <p>Hygrometer</p>	 <p>Rain gauge</p>	 <p>Barometer</p>

Weather station instruments

Sunshine	Temperature	Wind
 <p>Sunshine recorder</p>	 <p>Thermometer</p>	 <p>Anemometer</p>

Vocabulary about the weather:

<http://www.edheads.org/activities/weather/glossary.htm>

Pequeñas animaciones en inglés de los tres tipos de lluvias:

<http://www.bbc.co.uk/schools/gcsebitesize/geography/weather/elementsofweatherrev6.shtml>

Paquete de actividades Jclíc sobre el tiempo atmosférico:

http://clic.xtec.net/db/act_es.jsp?id=1075

forecast:

<http://news.bbc.co.uk/cbbcnews/hi/weather/default.stm>

interactive weather:

<http://www.scholastic.com/kids/weather/>

dos divertidos juegos Report the Weather and Predict the Weather con audio en inglés:

<http://www.edheads.org/activities/weather/>

Experimenta con los instrumentos meteorológicos:

http://teacher.scholastic.com/activities/wwatch/gather_data/

Quiz about measuring the weather:

<http://www.bbc.co.uk/apps/ift/schools/gcsebitesize/geography/quizengine?quiz=mappingmeasuringtest&templateStyle=geography>

Hot potatoes de Pablo:

<http://www.ieslosremedios.org/~pablo/webpablo/web1eso/3atmosphere/Hotpotatoes/EmparejarAparatosMeteorologicos.htm>

<http://www.ieslosremedios.org/~pablo/webpablo/web1eso/3atmosphere/Hotpotatoes/EmparejarAparatosMeteorologicos.htm>

<http://www.ieslosremedios.org/~pablo/webpablo/web1eso/3atmosphere/Hotpotatoes/OrdenarTemperaturas.htm>

<http://www.ieslosremedios.org/~pablo/webpablo/web1eso/3atmosphere/Hotpotatoes/EmparejarEstadoCielo.htm>

<http://www.ieslosremedios.org/~pablo/webpablo/web1eso/3atmosphere/Hotpotatoes/QuizWeatherForecast.htm>