

THE SOLAR SYSTEM

Read the definitions, then label the diagram below

Definitions

Sun - The Sun is a star at the center of our Solar System.

Mercury - Mercury is the planet closest to the Sun.

Venus - Venus is the second planet from the Sun. It is the hottest planet.

Earth - Earth is the third planet from the Sun and the planet we live on.

Mars - Mars is a red planet and the fourth planet from the Sun.

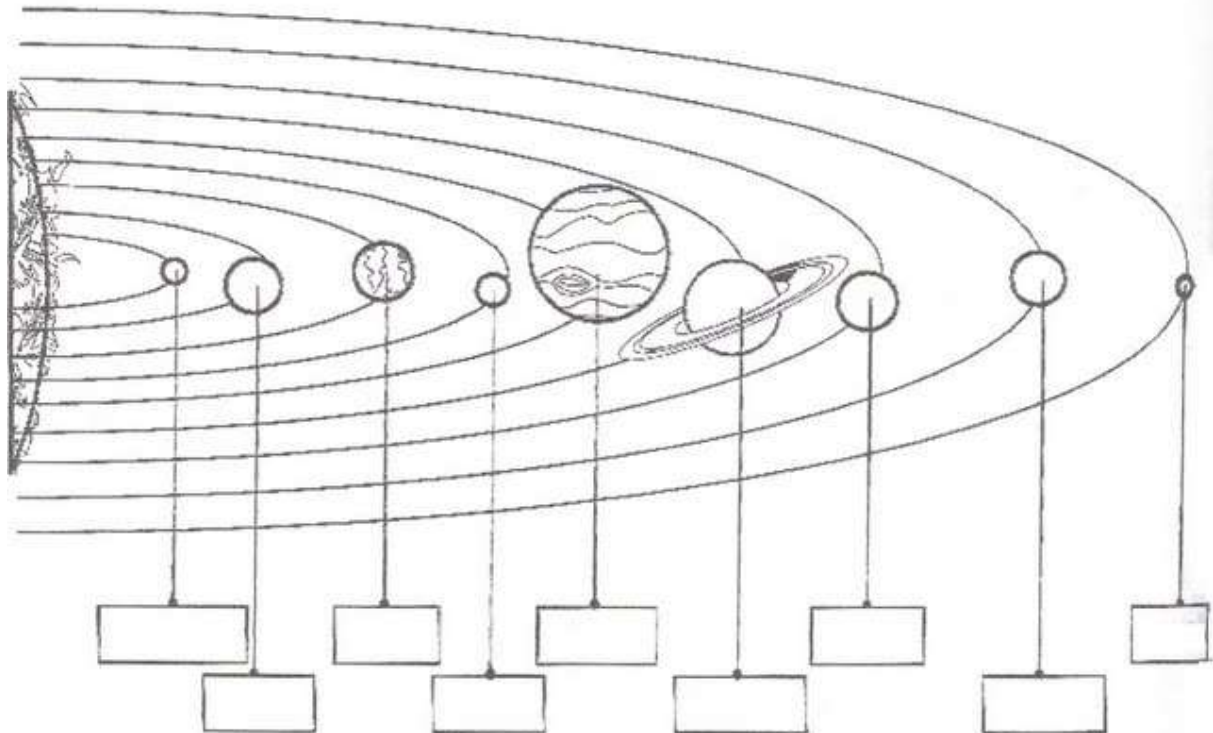
Jupiter - Jupiter is the fifth planet from the Sun. This gas giant is the largest planet.

Saturn - Saturn is the sixth planet from the Sun. This gas giant is large and it has beautiful rings.

Uranus - Uranus is a gas giant and it is the seventh planet from the Sun.

Neptune - Neptune is a gas giant and it is the eighth planet from the Sun.

Pluto - Pluto is a dwarf planet that is the farthest planet from the Sun. It is smaller than the eight planets.





EARTH'S MOVEMENTS

Fill in this table with the following sentences:

MOVEMENTS

Movements around
the Earth's axis

TIME

Seasons

Movements around
the Sun

Different climates in
the planet

One day (24 hours)

DEFINITIONS

Different hours in the
planet

ROTATION

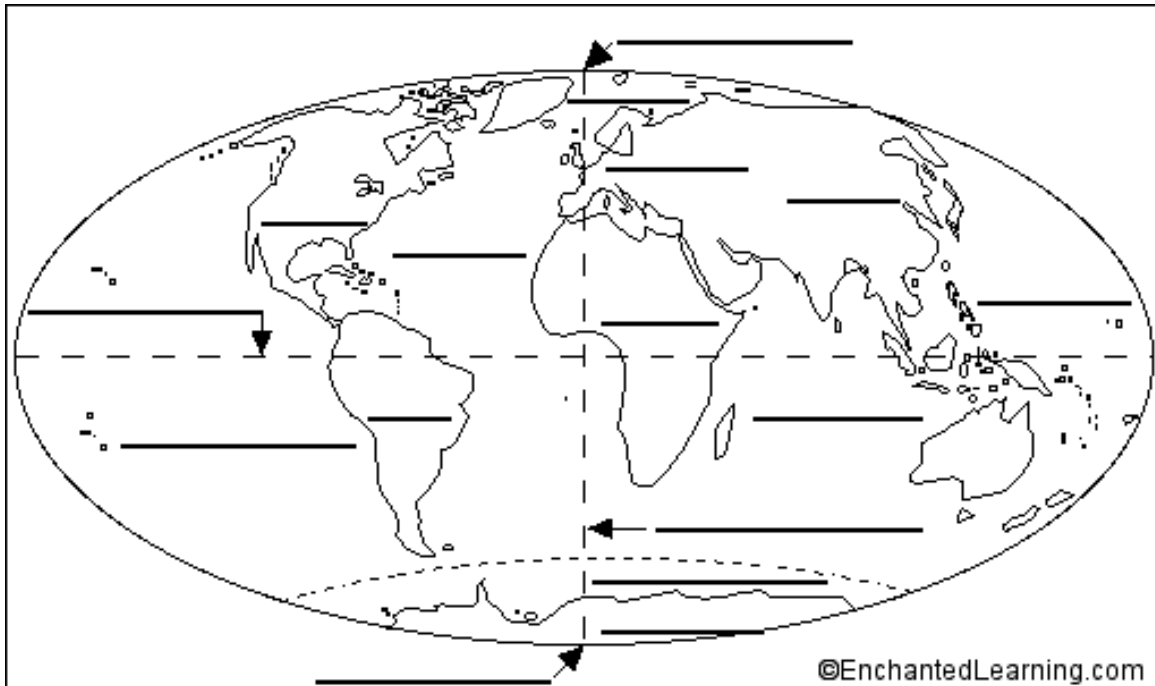
Days and nights

REVOLUTION

EFFECTS

One year (365 days)

CONTINENTS AND OCEANS



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Arctic Ocean	Africa	Equator
Atlantic Ocean	Antarctica	North Pole
Indian Ocean	Asia	South Pole
Pacific Ocean	Australia	Prime Meridian
Southern or Antarctic Ocean	Europe	
	North America	
	South America	

1. What are the five oceans on Earth?

2. What are the seven continents on Earth?

3. Color the oceans and seas blue.

4. Color the continents green.

5. Draw a red line along the equator.

6. What ocean lies between Africa and the Americas? _____



7. What ocean lies between Asia and the Americas? _____

8. What is the name of the ocean at the North Pole? _____

9. What is the name of the continent at the South Pole? _____

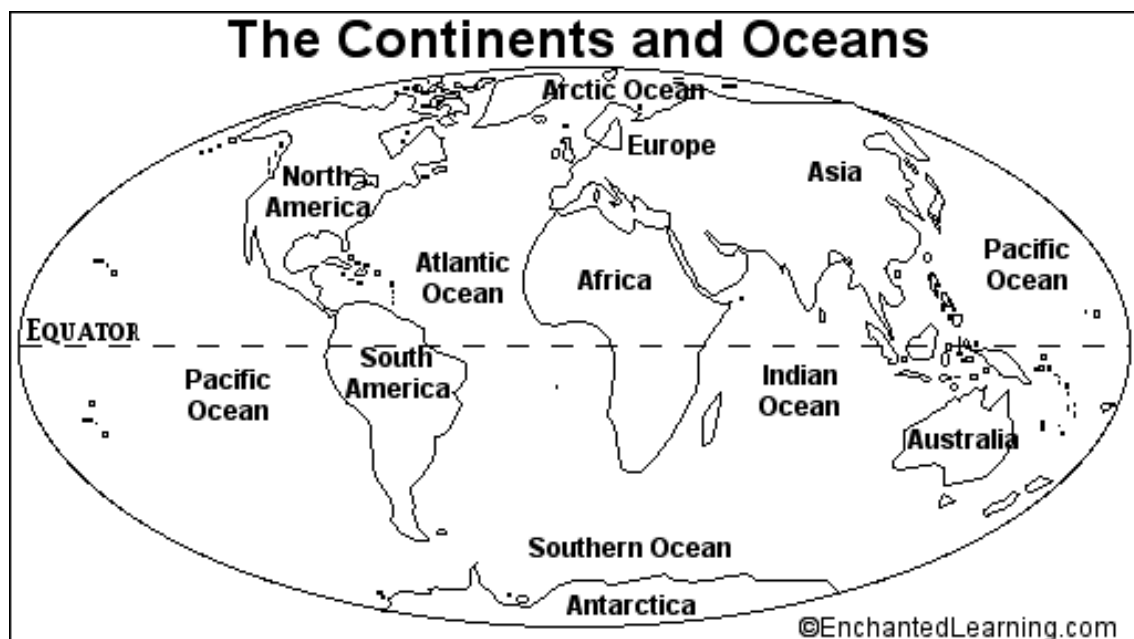
10. What is the name of the ocean that surrounds Antarctica? _____

11. What ocean borders Africa to the east? _____

12. What continent is bordered by the Indian Ocean (to the west) and the Pacific Ocean (to the east)? _____

13. Which two continents are parts of one huge land mass (they are separated by a chain of mountains)? _____ and _____

14. What is the name of the imaginary line that is halfway between the poles?

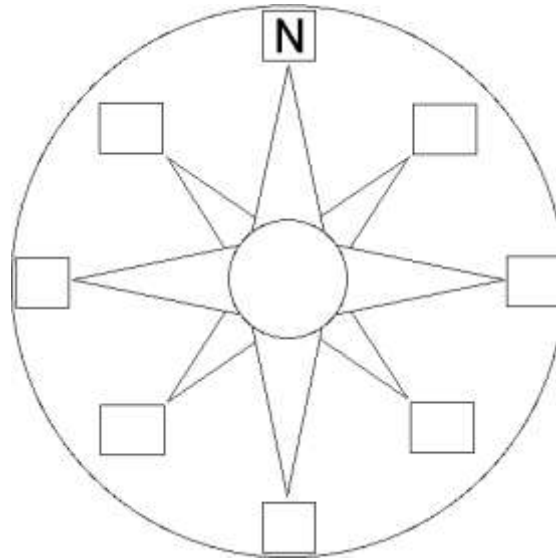




Compass Rose

A compass rose is a design on a map that shows directions. It shows north, south, east, west, northeast, northwest, southeast, and southwest.

When north is at the top of the compass rose (as it often is), south is at the bottom, east is on the right, and west is on the left. Northeast is between north and east, northwest is between north and west, southeast is between south and east, and southwest is between south and west.



1. Fill in the rest of the directions on the compass rose, using the standard abbreviations: N=North, S=South, E=East, W=West, NE=Northeast, NW=Northwest, SE=Southeast, SW=Southwest.

2. What ocean borders Spain and Portugal to the west? _____

3. What sea borders Spain to the east? _____

4. What is the name of the narrow channel of water that separates Spain (in Europe) from Morocco (in Africa)? _____

5. What is the name of the chain of mountains in the northeast of Spain?

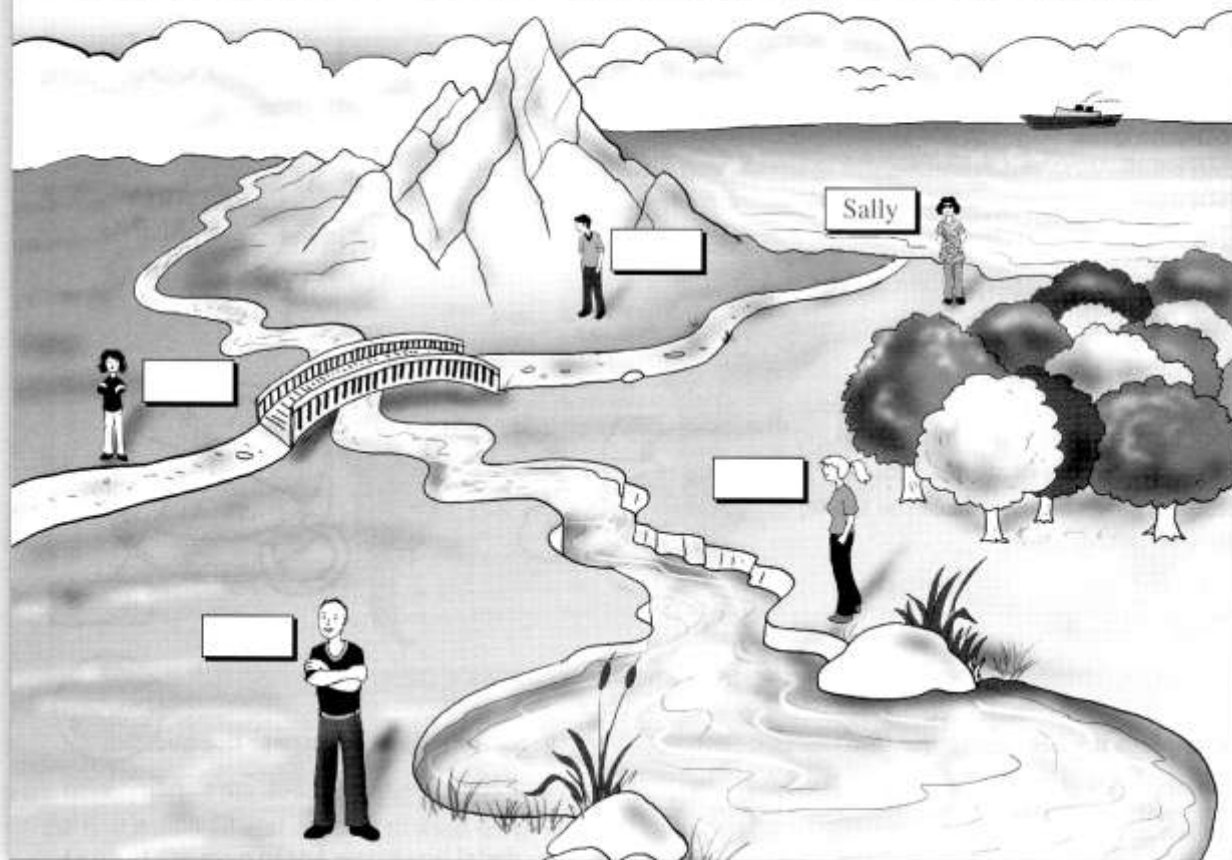
6. What is the name of the country that is in the north of Spain across this chain of mountains? _____

7. What is the name of the tiny country located on the northeastern border of Spain?

8. If you wanted to travel from Lisbon to Madrid, in which direction would you head?
(a) northeast (b) northwest (c) southeast (d) southwest

FINDING YOUR WAY (2)

1 Look at the picture, and read the descriptions. Write each person's name in the correct place.



- | | |
|--|--|
| 1. Joe is: south of the mountain, north of the road and east of the river. | 3. Dennis is: south of the road and west of the lake. |
| 2. Megan is: south of the road, north of the lake and east of the bridge. | 4. Rachel is: south of the mountain, west of the bridge and north of the road. |

2 Where is Sally? Use the directions and the places to describe where she is.

Sally is north of

1 Complete the sentences with the words below.

points • rises • compass • moss • sets

- We can use the sun or a to find our way.
- The sun in the east.
- The sun in the west.
- A compass needle north and south.
- We can find north by looking for on rocks and stones.

2 Read the clues and answer the questions.

- It is early morning. You are standing with your back to the sun. In which direction are you facing?
.....
- It is evening. You are standing with your back to the sun. In which direction are you facing?
.....

Label the Volcano Diagram

Read the definitions and then label the diagram below.

Definitions

Ash cloud - an ash cloud is the cloud of ash that forms in the air after some volcanic eruptions.

Conduit or pipe - a conduit is a passage through which magma (molten rock) flows in a volcano.

Crater - a crater is a mouth of a volcano in a volcanic vent that ejects lava and volcanic ash

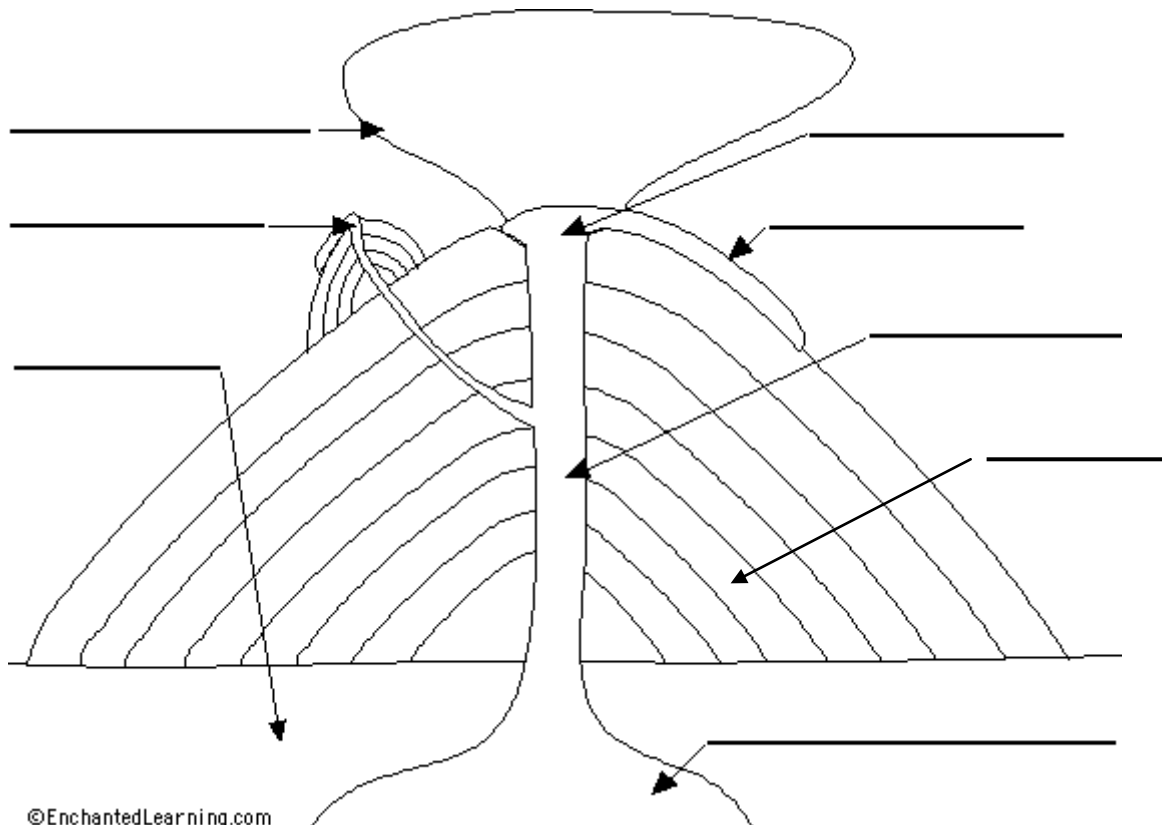
Lava - lava is molten rock; it usually comes out of erupting volcanoes.

Magma chamber - a magma chamber contains magma (molten rock) deep within the Earth's crust.

Volcanic cone - a volcanic cone is a cone-shaped volcano formed by an accumulation of volcanic debris (rocks, ashes, lava...)

Secondary cone - a secondary cone is a secondary cone-shape in the side of a volcano.

Crust - the crust is Earth's rocky layer.



Label Landforms

Label the landforms using the word bank below.



archipelago bay gulf	isthmus island lake	peninsula river strait
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Vocabulary: Landforms and Bodies of Water

- Archipelago:** An archipelago is a group of islands together in a sea or ocean.
- Bay:** A bay is a body of water that is partly surrounded by land (and is usually smaller than a gulf).
- Gulf:** A gulf is a part of the ocean or sea that is partly surrounded by land (it is usually larger than a bay).
- Island:** An island is a piece of land that is surrounded by water.
- Isthmus:** An isthmus is a narrow strip of land connecting two larger landmasses.
- Lake:** A lake is a large body of water surrounded by land on all sides.
- Peninsula:** A peninsula is a body of land that is surrounded by water on three sides
- River:** A river is a large and flowing body of water that usually empties into a sea or ocean.
- Strait:** A strait is a narrow body of water that connects two larger bodies of water

CONTINENTAL LANDFORMS:

- Plains** are flat lands that have only small changes in elevation.
- A **plateau** is larger and it used to be higher than the surrounding land.
- A **mountain** is a very high place on Earth; sometimes there is a peak on the top of the mountain.
- A **hill** is a small elevation in the Earth's surface.
- A **valley** is a low place between mountains, often having a river or stream running along the bottom. Valleys can be wide or narrow like a canyon.



Landforms questions

1. A group of islands is called _____
2. What's a flat land called? _____
3. What's a lake?
4. What's a piece of land surrounded by water?
5. An isthmus connects _____
6. What's an ocean?
7. What's a valley?
8. What's higher a mountain or a hill?
9. What's a peninsula?
10. Where does a river empty?

LANDFORMS WORDSEARCH

Find 10 landforms: River- Isthmus- Mountain- Peninsula- Lake- Hill- Sea- Valley- Ocean- Island

U	V	Z	U	I	S	L	S	A	N	F	V	C	I	W
Y	I	R	I	F	A	E	S	G	P	U	H	L	S	N
E	S	I	J	P	M	E	T	Q	X	B	A	Y	L	S
O	T	I	M	M	Y	W	Y	H	P	C	E	X	A	J
K	H	R	S	G	Y	I	J	M	J	L	M	P	N	Z
J	M	V	G	W	T	E	O	X	L	B	V	G	D	C
R	U	A	S	T	K	Q	Y	A	J	E	Y	C	L	Z
E	S	F	U	A	L	N	V	R	P	R	O	I	C	S
V	N	D	L	C	O	P	C	N	B	E	W	N	D	P
I	R	O	F	C	R	L	N	I	A	T	N	U	O	M
R	C	F	E	N	M	H	I	L	L	O	J	Q	L	K
G	W	A	I	J	H	Y	Z	H	F	Q	N	I	G	Q
X	N	X	P	E	N	I	N	S	U	L	A	P	M	B
F	T	Y	M	X	G	L	C	P	G	Y	T	M	D	S
G	E	W	M	F	F	P	K	J	O	E	C	W	P	Q



THE ATMOSPHERE

Match:

- | | |
|---|--------------------------|
| 1.- Layer of atmosphere where weather, clouds and smog occur | a) Ionosphere |
| 2.- Layer of atmosphere that has a high concentration of electrically charged particles | b) Nitrogen |
| 3.- Most common gas in the atmosphere | c) Ozone |
| 4.- Layer of atmosphere that includes the ozone layer | d) Stratosphere |
| 5.- The upper layer of atmosphere near the space | e) Ultraviolet radiation |
| 6.- This gas is naturally in the stratosphere but is considered a pollutant in the lower atmosphere | f) Exosphere |
| 7.- The ozone layer absorbs... | g) Troposphere |

Fill the gaps with the following words:

living beings oxygen ultraviolet rays

The atmosphere is very important for _____ because: It contains the _____ that we need to breathe. It protects us from the _____

Choose:

The main gas in the atmosphere is:

- A. Hydrogen
- B. Oxygen
- C. Water
- D. Nitrogen

The Earth atmosphere is plenty of a gas which doesn't appear in other planets.

Which gas is it?

- A. Oxygen
- B. Nitrogen
- C. Carbon dioxide
- D. Methane

Why our planet is rich in oxygen?

- A. Because it is near the Sun.
- B. Because there are a lot of plants.
- C. Because there are volcanoes
- D. Because it is far from the Sun.

Write the answer in your notebook with complete sentences:

1. What's the name the first layer of atmosphere? How long is it?
2. Do you know any characteristics about the Troposphere?
3. What altitude does the plane fly? In which layer is it?
4. Is there oxygen in all layers of the atmosphere?
5. Where is there the most of the oxygen?
6. Where is the ozone layer?
7. What is the ozone layer for?



Do you know the difference between weather and climate?

Weather is the condition of the atmosphere in a day. This includes temperature, rainfall and wind.

Climate is the weather conditions of a place, usually measured over one year.

Climate Elements

- **Temperature** is how hot or cold the atmosphere is, how many degrees **Celsius (centigrade)** it is above or below freezing (0°C).
- **Humidity** is the amount of water vapour in the atmosphere.
- **Precipitation** is the water that falls from the air to the ground. Precipitation includes snow, hail and rain.
- **Atmospheric pressure (or air pressure)** is the weight of air resting on the earth's surface. Pressure is shown on a weather map with lines called **isobars**.
- **Wind** is the movement of air masses from high pressure areas (highs) to low pressure areas (lows).

Measuring the weather

Weather stations are places where a variety of instruments are used to measuring the weather. 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 percentage (%)
- **Rain gauges** are containers that collect and measure rainfall or any other form of **precipitation**. Levels of rainfall are measured in millimetres (mm).
- **Barometers** are used to measure **atmospheric pressure** in millibares (mb).
State of sky: sunny, sunshine, cloudy, overcast, clear sky.
- **Maximum and minimum thermometers** measure the highest and lowest **temperature** in degrees celsius (°C). From the lowest temperatures to the highest temperatures, you can use these adjectives: **freezing** (below 0°C) < **cold** < **cool** < **temperate** = mild < **warm** < **hot**.
- **Wind vanes** are used to show the direction of the **wind**. **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**.

Make a mural about the climate elements:

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

NATURAL LANDSCAPES IN THE WORLD

Rainforests or jungles are near the equator in Central America, parts Africa and Asia. They are very hot and humid and contain a huge variety of plants and animals. It is typical of equatorial climate with abundant precipitations.



Savannah or tropical grasslands are hot and dry, dominated by grass and occasional trees. They have two different seasons a dry season and a rainy season. It is typical of the tropical climate it is between the jungle and the desert.



Desert is an arid zone, where vegetation is extremely poor and it only grows in oases. There are only a few plants like cactus, palm and esparto grass. This vegetation is typical of desert climates.



Mediterranean forest is the typical vegetation of Mediterranean climate, which is characterised by temperate winters as well as hot and dry summers. A Mediterranean forest has evergreen trees.



Atlantic forest is the typical vegetation of Oceanic climate, which has temperate temperatures and abundant precipitation all the year. An Atlantic forest has deciduous trees.



Taiga is the typical vegetation of Continental climate, which has very cold winters as well as very hot and humid summers. The taiga is made up of conifers.





Match each picture with the name of the climate, climatic characteristics and natural vegetation:



Temperate Oceanic climate

Temperate Mediterranean climate

Temperate Continental climate



Deciduous forest

Evergreen forest

Meadows

Coniferous forest or taiga

Hot and rainy summers, extremely cold and dry winters.

Dry and hot summers, mild and rainy winters.

Mild temperatures all year, abundant and regular precipitation.



1. What instrument do you use to know the temperature?
2. Which units do we use to express temperature?
3. What instrument do we use to know atmospheric pressure?
4. The units for atmospheric pressure are...
5. What instrument do you use to know the humidity?
6. Which units do we use to express the humidity?
7. What instrument do you use to know the precipitations?
8. Which units do we use to express the precipitations?
9. What instrument do you use to know the speed of wind?
10. Which units do we use to express the speed of wind?
11. What instrument do you use to know the direction of the wind?



Zones of Our Planet



Find all of these words:

- Antarctic Circle
- Arctic Circle
- climate
- desert
- Equator
- grassland
- latitude
- longitude
- North Pole
- polar
- rain forest
- season
- South Pole
- temperate
- Tropic of Cancer
- Tropic of Capricorn
- tropical
- tundra

Label the following on the globe to the right:

- Antarctic circle
- Arctic Circle
- Equator
- North pole
- South pole
- Tropic of Cancer
- Tropic of Capricorn





VOCABULARY 1ST TERM

THE SOLAR SYSTEM AND THE EARTH

Solar system, sun, star, planet, satellite, comet, asteroid, asteroid belt, Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, inner, outer, rings, dwarf planet, rotation, revolution

Pacific Ocean, Indian Ocean, Atlantic Ocean, Arctic Ocean, Southern or Antarctic Ocean. Europe, Asia, Africa, North America, South America, Antarctica, Australia.

Compass Rose, North, South, East, West, northeast, northwest, southeast and southwest. At the top, at the bottom, on the left, on the right, compass, point, rise, set, moss.

Arctic Circle, Equator, North Pole, South Pole, Tropic of Cancer, Tropic of Capricorn, Antarctic Circle, Prime Meridian

THE RELIEF AND LANDFORMS

Relief, landforms, mountain, plateau, plain, valley, depressions, cape, gulf, strait, bay, island, peninsula, isthmus, archipelago, river, ocean, sea, continent

Volcano, earthquake, ash cloud, conduit or pipe, lava, magma chamber, volcanic cone, crater, secondary cone, crust, mantle, external core and internal core

WEATHER AND CLIMATE

The layer of atmosphere: troposphere, stratosphere, mesosphere, thermosphere or ionosphere and exosphere. Hydrogen, oxygen, carbon dioxide, ultraviolet radiations, rays, air, gas, breathe, ozone layer, living beings.

Temperature, wind, atmospheric pressure, humidity, precipitations, weather, climate, hygrometers, rain gauges or pluviometers, barometers, thermometers, wind vanes, anemometers.

Rainforest, desert, savannah, grassland, evergreen forest, deciduous forest, coniferous forest, tundra, ecuatorial climate, tropical climate, desert climate, mediterranean climate, oceanic climate, continental climate