

# TOPIC 1: THE EARTH



## CONTENTS:

1. The solar system
2. The representation of the Earth
3. The cardinal points
4. The geographical coordinates
5. The scale
6. Earth movements

phillipmartin.com

MARTIN

phillipmartin.info

Full name: .....

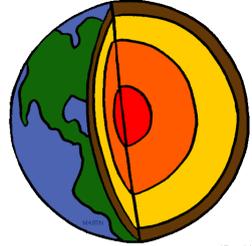
Date: .....

Class: .....

School: .....

Teacher: .....

# VOCABULARY



## A

Asteroid: asteroide  
Arrow: flecha  
Axis: eje

## B

Between: entre  
Bright: brillante  
Broad: ancho

## C

Call: llamar  
Celestial: azulado  
Close: cercano  
Compass: brújula

## D

Degree: grado  
Dust: polvo

## E

Equator: ecuador

## F

Flat: llano, plano  
Frozen: congelado

## G

## H

## I

Ice: hielo

## J

## K

Key: clave

## L

Lake: lago  
Landscape: paisaje

## M

made of: hecho de  
many: muchos/as  
mass: masa  
meaning: significado  
measurements: medidas  
Milky way: vía láctea  
Moon: luna  
Mountain: montaña  
Movement: movimiento

## N

No longer: ya no

## O

Orbit: girar  
Own: propio

## P

## Q

## R

Revolution: traslación  
Rocky: rocoso  
Rotation: rotación  
round: alrededor de  
rings: anillos  
river: ríos

## S

Scale: escala  
Scientists: científicos  
Size: tamaño  
Sphere: esfera  
Star: estrella  
Sun: sol  
Surface: superficie

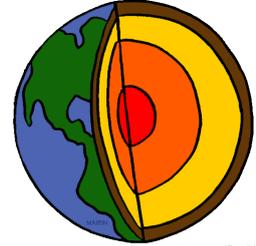
## T

Take: durar  
The closest: el más cercano  
The hottest: el más caluroso  
The largest: el más grande  
Title: título

## W

While: mientras que

# TOPIC 1: THE EARTH

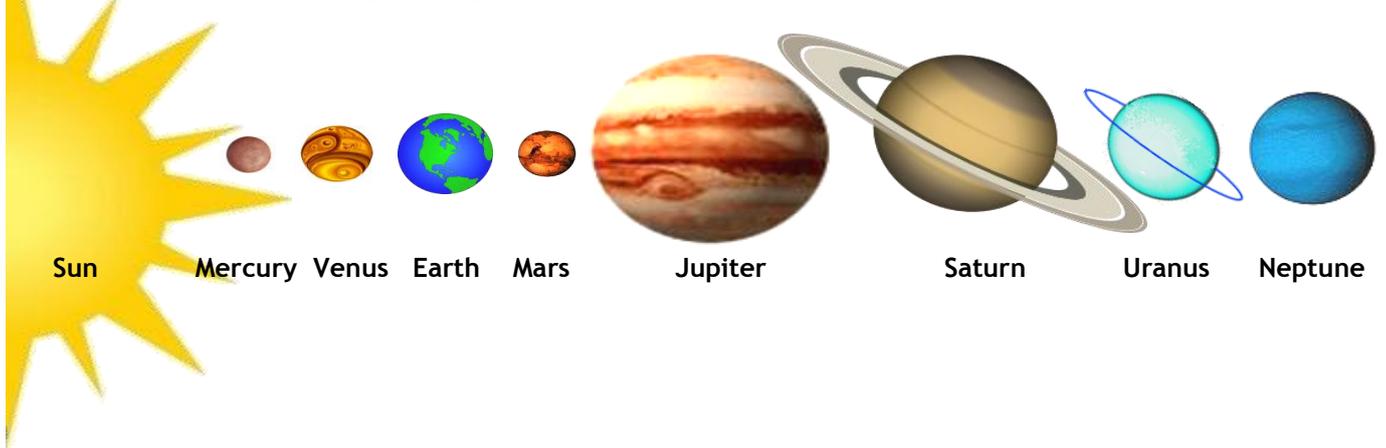


## 1. THE SOLAR SYSTEM

The Earth is our planet. It is round and similar to a sphere. The Earth is part of the solar system. This system has got:

- one star.
- the sun.
- satellites of the planets.
- a large number of asteroids.
- eight planets. Their names are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune). Scientists say that Pluto is no longer a planet of the solar system.

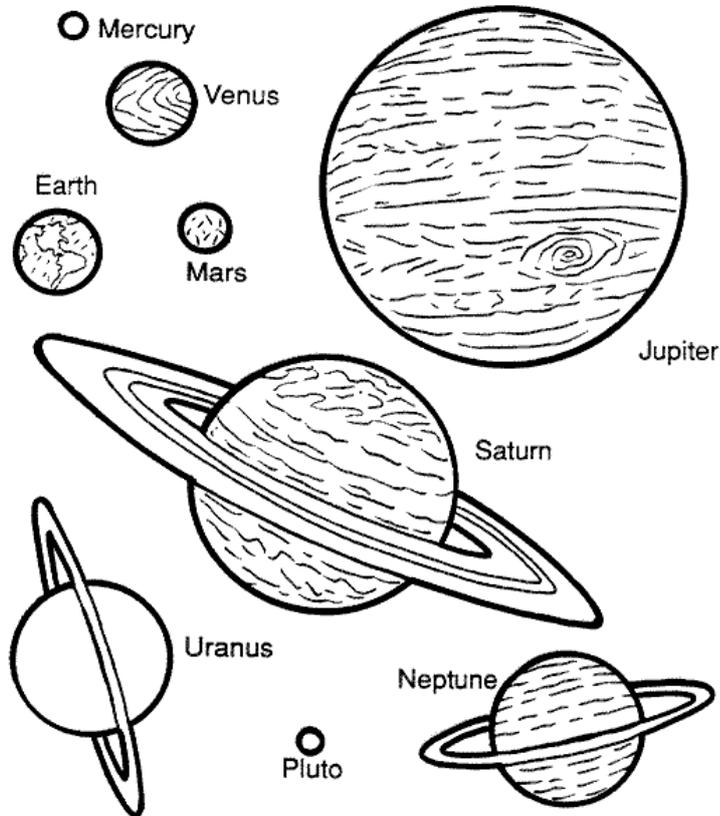
The Solar System belongs to a galaxy, called the Milky Way.



### Activity 1

Have a look at the picture and describe the colour and size of each planet.

1. Mercury is small and pink
2. Venus .....
3. Earth .....
4. ....
- 5.- .....
- 6.- .....
- 7.- .....
- 8.- .....



- ✓ **Jupiter** is the largest planet.
- ✓ Jupiter is made of gas.
- ✓ It has rings of ice and dust.
- ✓ Jupiter has 63 moons.

- ✓ **Saturn** is the sixth planet.
- ✓ It is made up of gases.
- ✓ It has rings of ice, dust and rocks.
- ✓ Saturn has 62 moons.

- ✓ **Neptune** is the last planet in the solar system.
- ✓ Neptune is very cold.
- ✓ Neptune has four rings.
- ✓ It has 13 moons.

- ✓ **Venus** is the second planet from the sun.
- ✓ it is the hottest planet.
- ✓ It has many volcanoes.
- ✓ It has no oxygen or water.

- ✓ **Uranus** is the seventh planet.
- ✓ Uranus is the coldest planet.
- ✓ It has ice on its surface.
- ✓ It has 27 moons.

- ✓ **Mars** is the fourth planet.
- ✓ Mars is very cold.
- ✓ Mars is a red and rocky planet.
- ✓ It has two small moons.

- ✓ **Earth** is the third planet from the sun.
- ✓ It is our home.
- ✓ It has a lot of water.
- ✓ It has one moon.

- ✓ **Mercury** is the closest planet to the sun.
- ✓ it is hot in the day and cold at night.
- ✓ it is made of rock
- ✓ it has no water, air or moons

## Activity 2

Read, unscramble the words, fill in the gaps and say TRUE or FALSE

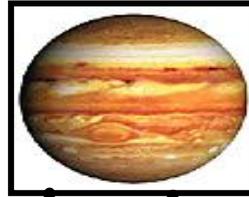
- 1.- RYEUMRC: \_ \_ \_ \_ \_ is the first planet in the solar system. It is a small planet. It is the closest to the sun. It hasn't got moons but it has got many craters.
- 2.-SVEUN: \_ \_ \_ \_ \_ is the second planet in the solar system. it is a bright and hot.
- 3.-THARE: is the planet where we live. It is the third planet in the solar system.
- 4.-RSMA: \_ \_ \_ \_ \_ is the fourth planet. it is a small and rocky. People call it the red planet.
- 5.-TREIPUJ: \_ \_ \_ \_ \_ is the fifth planet. It is bright and large.
- 6.-STRNUA: \_ \_ \_ \_ \_ is the sixth planet in order from the sun. It has got many rings. Its rings are flat and broad. The rings are made of dust and rock.
- 7.-UNARSU: \_ \_ \_ \_ \_ is the seventh planet in order from the sun. it is a planet made of gas and it is really cold.
- 8.- PTUENNE: \_ \_ \_ \_ \_ is the eighth planet in proximity to the sun.



M\_rc\_ry



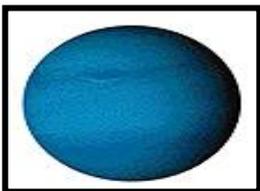
M\_rs



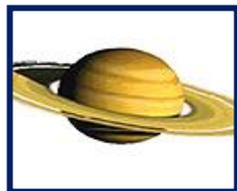
J\_p\_t\_r



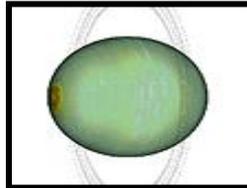
V\_n\_s



N\_pt\_n\_



S\_t\_rn



\_r\_n\_s



\_ \_rth

## TRUE OR FALSE

1. Uranus has got many rings.  
.....
2. Jupiter is a large planet.  
.....
3. Venus is a hot planet.  
.....
4. People call Venus the red planet.  
.....
5. Saturn is the eighth planet in the solar system.  
.....
6. Uranus is a cold planet  
.....



### Activity 3

Match pictures with words

Asteroid

Comet

Galaxy

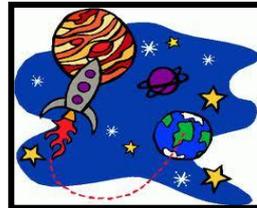
Star

Planet

Satellite



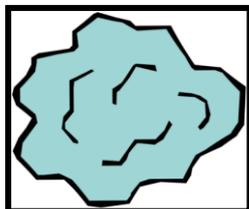
1



2



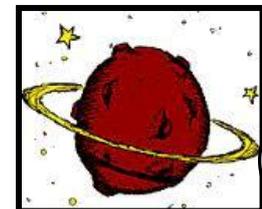
3



4



5



6

1.- .....

2.- .....

3.- .....

4.- .....

5.- .....

6.- .....

## Activity 4

Match the words to their definition

1	Comet
2	Galaxy
3	Planet
4	Asteroid
5	Star
6	Satellite

a) A small, frozen mass of dust and gas around the sun.
b) A group of stars, gas and dust held together by gravity.
c) Celestial body orbiting or moving around a planet.
d) Small rocky body orbiting the sun.
e) Luminous point in the night sky.
f) Celestial body moving in an elliptical orbit round a star

## 2. THE REPRESENTATION OF THE EARTH

Our planet, the Earth, has the form of a sphere.

We can represent it with a **globe** or a **map**.

A cartographer is a person who creates maps.



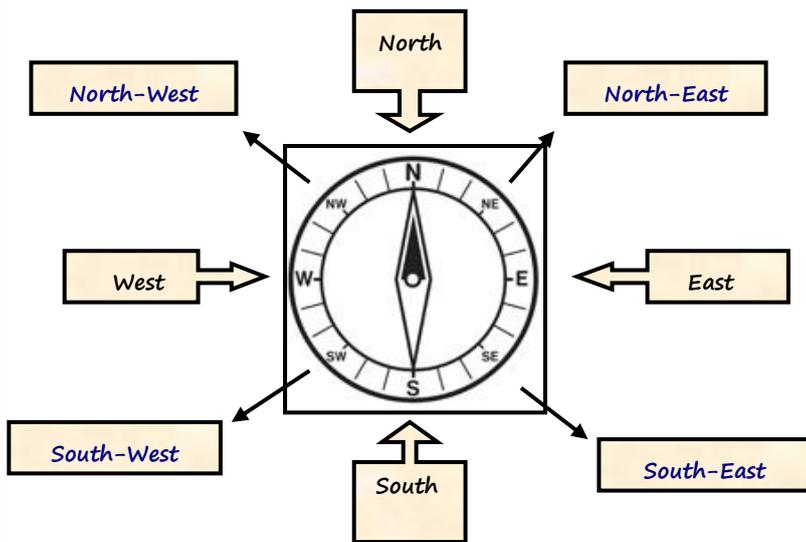
There are two types of maps: **topographical maps** give information about landscape (rivers, lakes, mountains) while **thematic maps** give information about climate, economy, demography, geology). Maps have got some elements:

- the key or legend to explain the meaning of symbols.
- the title.
- the scale.
- the arrow .
- geographical coordinates.



### 3.-THE CARDINAL POINTS/DIRECTIONS

Cardinal points are the four principal points of the compass: north, east, south and west. There are also four intermediate directions.



#### Activity 5

What is the meaning of the following words:

- NE .....
- SW .....
- SE .....
- NW .....

Have a look at the map of Spain. Where are these regions?



Have a look at the map of Spain. Where are these regions? Basque country, Galicia, Murcia, Andalusia, Cantabria, Balearic islands, Aragon, Valencia community, Extremadura and the Canary Islands.

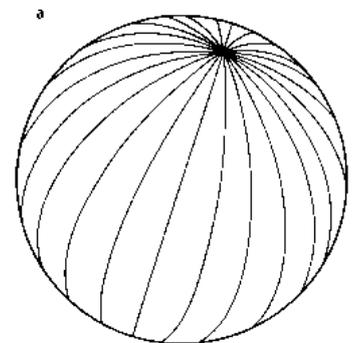
- 1.- Basque country is in the north of Spain.
- 2.- .....
- 3.- .....
- 4.- .....
- 5.- .....
- 6.- .....
- 7.- .....
- 8.- .....
- 9.- .....
- 10.- .....

#### 4.- THE GEOGRAPHICAL COORDINATES

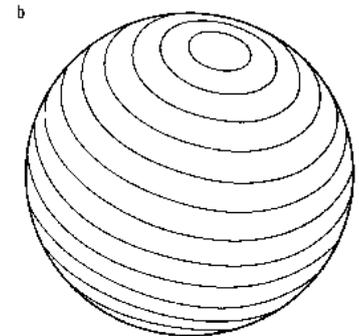
We use imaginary lines to find any place on the Earth. People call these lines the meridians and parallels. The units of measurement of geographical coordinates are degrees, minutes and seconds.

**Meridians** represent longitude with vertical lines. Greenwich is the first meridian because it divides the Earth into east and west.

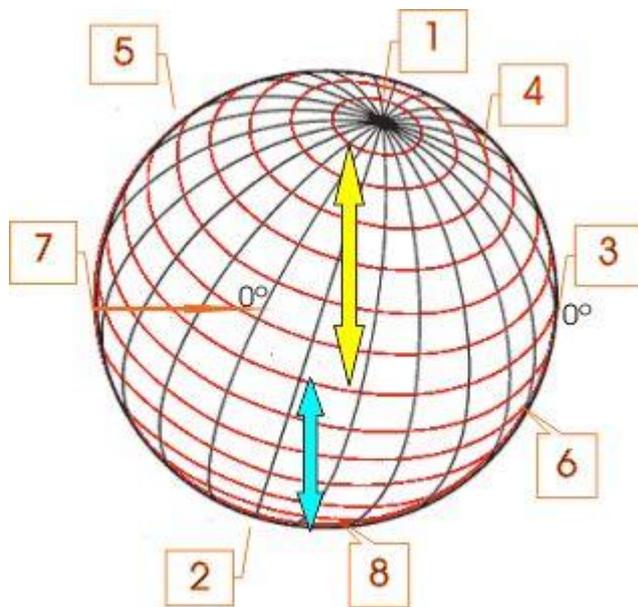
**Parallels** represent latitude with horizontal lines. Their names are Equator which divides the Earth into two hemispheres; In the Northern hemisphere, we can find Arctic circle and tropic of Cancer. In the Southern hemisphere, we can find Antarctic circle and the tropic of Capricorn.



Meridians



Parallels



**Activity 6** Connect concepts and numbers.

- 1.- .....
- 2.- .....
- 3.- .....
- 4.- .....
- 5.- .....
- 6.- .....
- 7.- .....
- 8.- .....

**4.- THE SCALES**

It is the proportion between the size of something and the representation of it.

	Verbal Scale	Representative fraction	Small scale
	1 in. = 1,485 mi 1 cm = 940 km	$\frac{1}{94,000,000}$	
	1 in. = 585 mi 1 cm = 370 km	$\frac{1}{37,000,000}$	

**5.- THE EARTH MOVEMENTS**

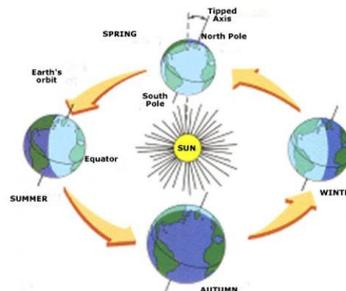
There are two important movements that affect The Earth:

**Rotation:** The Earth moves around its own axis. It takes 24 hours a day. The principal consequences of the rotation movement is the succession of **day and night**.



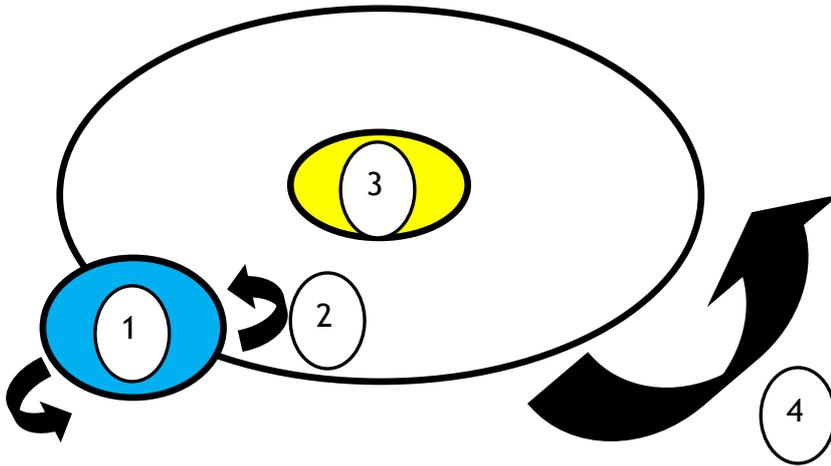
thanks to rotation movement,  
there is day and night

**Revolution or translation:** The Earth moves around the Sun. It takes 365 days. The principal consequences of the revolution movement is the succession of seasons: **spring, summer, autumn and winter**.



thanks to revolution movement,  
we have seasons

# solar system



Activity 7 Label the gaps

- 1.- \_\_\_\_\_
- 2.- \_\_\_\_\_
- 3.- \_\_\_\_\_
- 4.- \_\_\_\_\_

Activity 8 Remember:

- 1.- Geographical coordinates have got three units of measure. These are .....
- 2.- Greenwich is the *first/second/third* meridian and it divides our planet into ..... and .....
- 3.- The Equator is a *parallel/meridian* and it divides .....
- 4.- In the northern Hemisphere, we can find .....
- 5.- ....., we can find Antarctic circle and .....
- 6.- Two movements affect the Earth. The rotation movement is responsible for ..... and ..... is responsible for the four ..... Their names are ....., ....., ..... and .....
- 7.- There are ..... types of maps. Topographical maps inform about ..... while ..... inform about climate .....