

# TOPIC 6: THE LIQUID PART OF THE EARTH



## CONTENTS:

1. Origin of water on earth.
2. Properties and importance of water in living organisms.
3. Water in our planet. The water cycle.
4. Water in the continents.
5. The water that people consume.
6. Water contamination.
7. We must save water
8. Webgraphy.

Full name: .....

Date: .....

Class: .....

School: .....

Teacher: .....

# Vocabulary



## A

Acid rain: lluvia ácida  
Ago: hace

## B

Blood: sangre  
Boil: hervir  
Breathe: respirar

## C

Can: poder  
Carry: llevar  
Cell: célula  
Clean: limpiar  
Cooling: enfriamiento

## D

## E

## F

Fight: luchar, combatir  
Float: flotar  
Fluid: fluido  
Found: encontrado  
Freezing: congelación  
Fresh water: agua dulce.

## G

## H

Help: ayudar

## I

Illnesses: enfermedades

## J

Joints: articulaciones

## K

Keep: mantener

## L

## M

Made up of: hecho/a de  
Must: deber  
Mustn't: no deber

## N

## O

Oil spill: vertido de petróleo  
Our: nuestro/a/os/as

## P

## Q

## R

Remove: eliminar  
River banks: orillas de los ríos

## S

Salt water: agua salada.  
Say: decir  
Scientist: científico  
Should: deberíamos  
Shower: ducha  
Smell: olor  
Solvent: solvente

## T

Taste: sabor  
Throw: tirar  
Trees: árboles  
To: para

## U

## V

## W

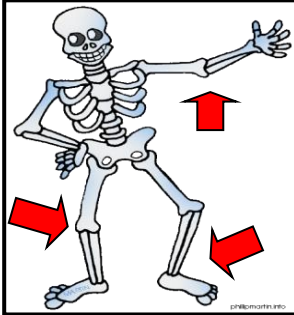
Was originated: fue originada  
Waste: desechos  
Waste bin: cubo de la basura

## X

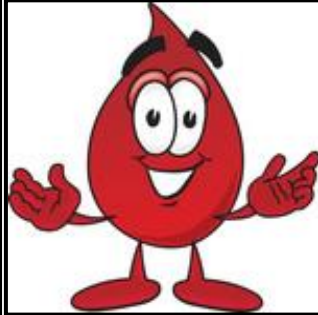
## Y

## Z

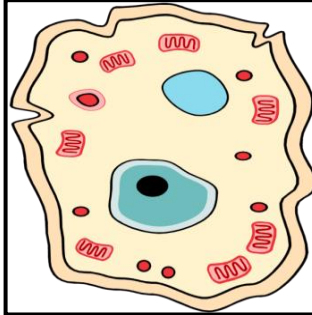
# Pictionary: nouns and verbs



**joint**



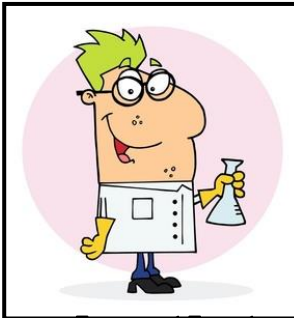
**blood**



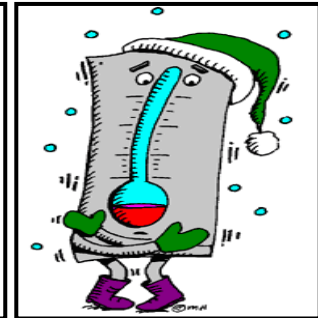
**cell**



**illness**



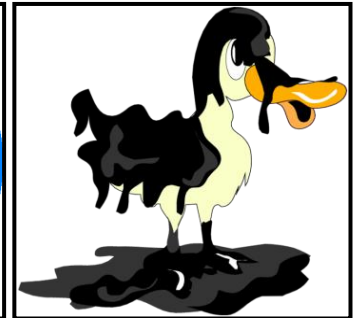
**scientist**



**freezing**



**water pollution**



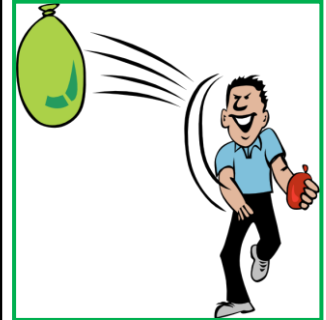
**oil spill**



**acid rain**



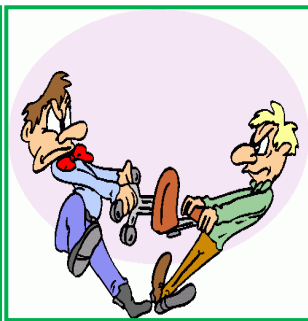
**waste bin rubbish**



**throw**



**boil**



**fight**



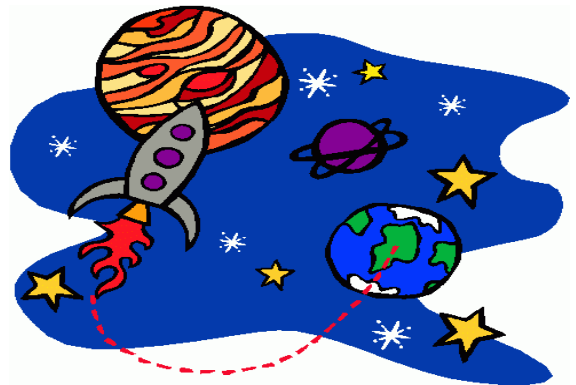
**carry**



**float**

### 1.- Origin of water on earth

Scientists believe that one part of the water on earth comes from interstellar space and the other part comes from water vapour that was originated in the cooling of our planet billions of years ago.



### 2.- Properties and importance of water in living organisms.

#### 2.1.- Properties of water

Water has the capacity to dissolve many substances. It is a good solvent with sugar and salt. Pure water has no colour, no smell and no taste. Water usually boils at 100°C. Water occupies more volume in freezing conditions. Ice floats in liquid water.

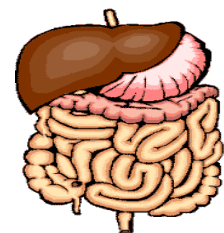


#### 2.- Importance of water in living organisms

Humans, animals and trees need water. Water helps plants to breathe. People also need water. Our blood is made up of water. Blood carries oxygen and food to our cells. We need water to digest food, remove waste, regulate our body temperature, protect our joints and organs and fight illnesses.



**digest food**



**remove waste**



#### Activity 1. Fill in the gaps

- 1.- Water is a good \_\_\_ v \_\_\_\_\_. It can dissolve many substances.
- 2.- You cannot \_\_\_\_\_ or \_\_\_\_\_ water. It also has no colour.
- 3.- Our cells receive oxygen thanks to \_\_\_\_\_.
- 4.- People need water to \_\_\_\_\_ food and \_\_\_\_\_ waste.
- 5.- Water is important to combat \_\_\_\_\_.



### 3.- Water on our planet

Water is **made up** of two elements. Its chemical formula is  $H_2O$ . The existence of water is essential for life on earth. Water has three different states: liquid, solid and gas. Water covers around 70% of the Earth's surface.

The hydrosphere has 97% of salt water and only 3% of fresh water. Water is **found** in oceans, seas, lakes, rivers... The Pacific Ocean is the largest ocean on Earth. The longest river in the world is the River Nile.



#### 3.1. The water cycle

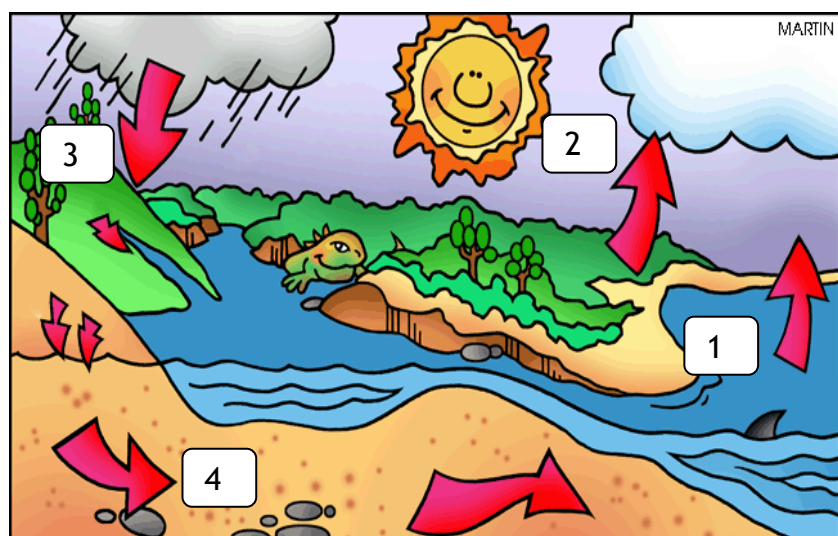
The sun evaporates water from lakes and oceans. The water vapour condenses and forms clouds. It rains and then rivers and lakes collect water again. This cycle never ends. It follows four processes:

**1.- Evaporation**

**2.- Condensation**

**3.- Precipitation**

**4.- Collection**



#### 4.- Water in the continents

The main bodies of water in **Europe** are North Atlantic Ocean, Mediterranean Sea, Black Sea, Baltic Sea and White Sea. Important rivers include Volga, Danube, Ural, Rhine, Elbe, Loire and Ebro.

The main bodies of water in **Asia** are Indian Ocean, Pacific Ocean, Arctic ocean, Yellow Sea, Arabian Sea, Thailand Sea. Important rivers include Euphrates, Tigris and Ganges.

The main bodies of water in **Africa** are Atlantic Ocean, Indian Ocean, Mediterranean Sea, Red Sea, Lake Victoria, Lake Chad and Nile River.

The main bodies of water in **Oceania** are Indian Ocean South Pacific Ocean, Coral Sea, Tasman Sea and Timor Sea.

The main bodies of water in **America** are Pacific Ocean, Atlantic Ocean, Caribbean Sea, Scotia Sea, Great Lakes, Mississippi River, Colorado River, Columbia River, Amazon River and Orinoco River

#### 5.- The water that people consume.

The water that people drink comes from rivers, lakes, aquifers or reservoirs. Water treatment plants remove impurities and clean water.



#### 6.- Water pollution

Water pollution is the contamination of water bodies like lakes, rivers and oceans. People are very often responsible for this.

Some fertilizers, pesticides and chemicals, acid rain and oil spills contribute to the pollution of water.



**7.- We must save water.**

We can help to prevent water pollution. For example:

- ✓ We **must** throw rubbish in the appropriate waste bin.
- ✓ We **mustn't** throw oils in the toilet.
- ✓ We **must** use water wisely. We **must** have short showers.
- ✓ We **must** plant trees and flowers.
- ✓ We **can** clean river banks.



**8.- Webgraphy.**

- <http://www.iesae.com/bilingue/ciencias/CIENCIAS.pdf>
- <http://eschooltoday.com/pollution/water-pollution/prevention-of-water-pollution.html>
- <http://es.scribd.com/doc/102689409/b-PDF>
- <http://mjrubio.wordpress.com/bilinguismo/1%C2%BA-eso/>
- <http://www.clipsahoy.com/webgraphics4/as5612.htm>

**Activity two: Wordsearch: Find the words and discover the hidden message**

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



BLOOD	CELL
FLOWERS	HUMANS
ILLNESS	IMPURITIES
JOINT	PESTICIDES
POLLUTION	

SCIENTISTS \_\_\_\_\_

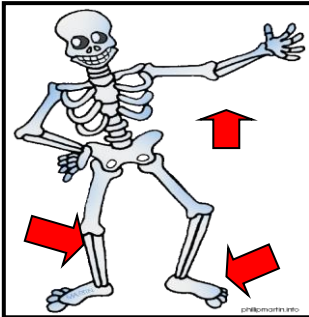
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

AGO

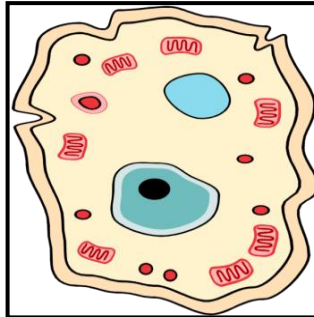
Activity 3. Unscramble the words and fill the gaps



**ntijo**



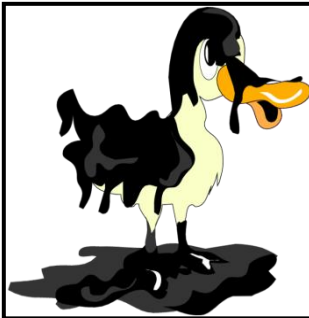
**reefingz**



**ecli**



**illenss**



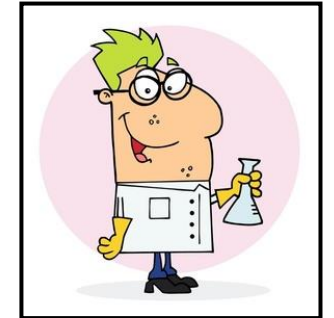
**ilo pills**



**boold**



**tewta lpuotino**



**cisnetits**

- 1.- Doctors say that we should drink two litres of water every day. Water is important because it protects our .....
- 2.- .....is a body fluid. It carries oxygen to our .....
- 3.- By ..... we understand the contamination of bodies of water like lakes and seas.
- 4.- ..... say that water has three different states: liquid, solid and gas.
- 5.- Look at John! What is he doing? He is drinking water right now. He says that you can ..... illnesses drinking much liquid.
- 6.- Scientists say that water occupies more volume in ..... conditions.
- 7.- ..... contribute to the pollution of water.



**Activity 4. TRUE or FALSE? Correct the false statements**

- 1.-Lake Chad is found in the Asian continent .....
- .....
- 2.- Mississippi river is found in the European continent. ....
- .....
- 3.- The hydrosphere has 3% of salt water and only 97% of fresh water .....
- .....
- 4.- Collection is a process in the water cycle .....
- .....
- 5.- Water helps us regulate our body temperature . ....

**Activity 5. Complete de diagrams**

**PROPERTIES OF WATER**

- Pure water has no .....
- Pure water has .....
- Pure.....
- It boils at .....
- It is a good .....



**THE WATER CYCLE**

It has four processes.  
Their names are:

- 1.- .....
- 2.- .....
- 3.- .....
- 4.- .....

**THE POLLUTION OF WATER IS DUE TO:**

- Some .....
- .....
- .....
- .....

**HOW CAN WE SAVE WATER?**

- 1.- We must .....
- 2.- We must .....
- 3.- We must .....
- 4.- We mustn't .....