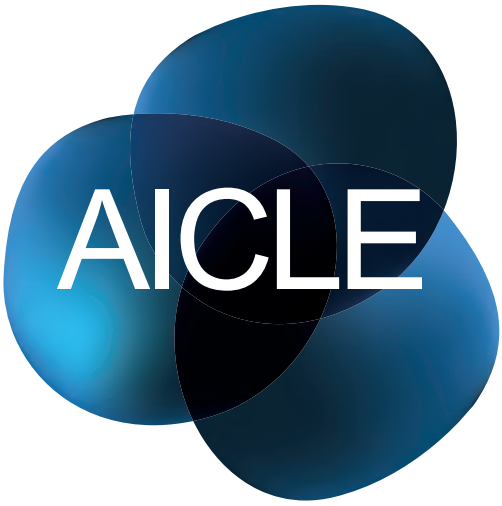
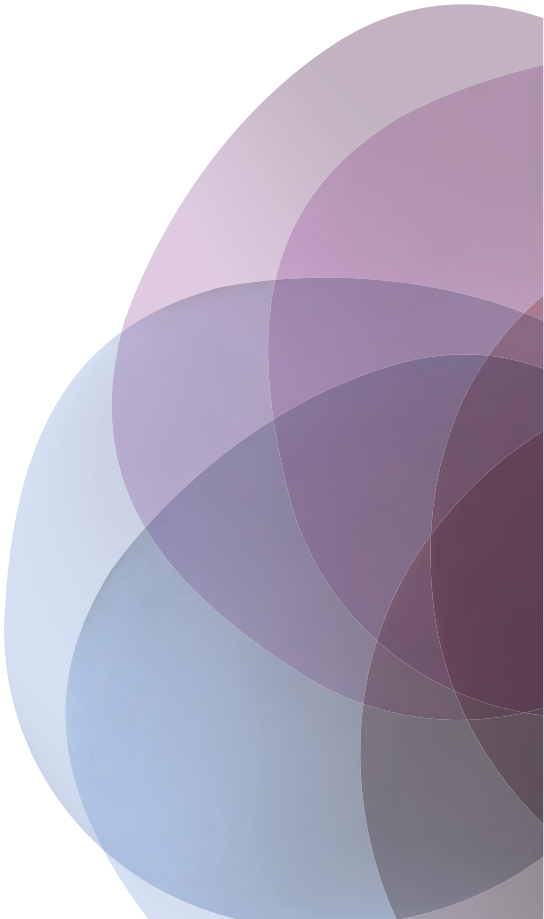
Conocimiento del medio natural, social y cultural

Primaria

JUNTA DE ANDALUCIA

Inglés





JUNTA DE ANDALUCIA

Identificación del material AICLE

TÍTULO	The Hydrosphere
NIVEL LINGÜÍSTICO SEGÚN MCER	A1.3 / A2.1 según las destrezas
IDIOMA	Inglés
ÁREA / MATERIA	Conocimiento del Medio Natural, Social y Cultural
NÚCLEO TEMÁTICO	El entorno y su conservación
GUIÓN TEMÁTICO	Se trata de una secuencia didáctica de conocimiento del medio en la que el alumnado estudiará la hidrosfera, dónde podemos encontrar agua en nuestro planeta, por qué el agua es importante para la vida y cuál es su distribución en la Tierra.
FORMATO	PDF. Grabación de audios de los textos
CORRESPONDENCIA CURRICULAR	6º de Primaria
AUTORÍA	Ramón Martín Mascareñas.
TEMPORALIZACIÓN APROXIMADA	8/10 sesiones
COMPETENCIAS BÁSICAS	**Competencia lingüística:** Al tratarse se una secuencia didáctica AICLE, el desarrollo de la competencia lingüística se trabaja conjuntamente con la consecución de los objetivos de área; en el apartado de contenidos abordamos más exhaustivamente el desarrollo de esta competencia. **Competencia en conocimiento del medio e interacción con el mundo físico:** En esta unidad el alumno desarrollara la capacidad de conocer algo mejor el entorno que le rodea centrándonos en el elemento esencial del agua. Estudiaremos el agua como elemento esencial para la vida y los Océanos de la Tierra prestando especial atención a características generales como corrientes y mareas, así como a características específicas de cada Océano. **Competencia matemática:** Se trabajará la distribución porcentual del agua en la tierra. **Tratamiento de la información y competencia digital:** Utilizaremos las TICs como fuente de información, además de usar software especifico para la confección de los diagramas en Word. **Competencia social y ciudadana:** En esta unidad enlazaremos los contenidos relativos a concienciar al alumnado sobre el concepto de que el agua es un bien escaso, la necesidad de su ahorro y su cuidado. **Competencia artística:** Se aborda en esta secuencia didáctica de forma somera cómo aparece el líquido elemento en la creación artística. **Competencia aprender a aprender:** En esta secuencia didáctica desarrollaremos varias pre-tareas y tareas que inicien al alumnado en la investigación científica, así como en métodos de observación y experimentación, deduciendo consecuencias a partir de ellos. **Autonomía e iniciativa personal:** Procuraremos que el alumnado tome sus propias decisiones en el planteamiento y desarrollo de la exposición de la tarea final, así como en el desarrollo de las tareas.

Tabla de programación AICLE

OBJETIVOS DE ETAPA	**1.** Identificar los principales elementos del entorno natural, social y cultural, analizando su organización, sus características e interacciones, y progresando en el dominio de ámbitos espaciales cada vez más complejos. **2.** Analizar algunas manifestaciones de la intervención humana en el medio, valorándola críticamente y adoptando un comportamiento en la vida cotidiana de defensa y recuperación del equilibrio ecológico y de conservación del patrimonio cultural. **3.** Interpretar, expresar y representar hechos, conceptos y procesos del medio natural, social y cultural mediante códigos numéricos, gráficos cartográficos y otros. **4** Utilizar las tecnologías de la información y comunicación para obtener información y como instrumento para aprender y compartir conocimientos, valorando su contribución a la mejora de vida de las personas.
CONTENIDOS DE CURSO / CICLO	- Utilización e interpretación de diferentes representaciones sobre un mismo espacio. (Planos, fotografías aéreas y croquis) - El agua en la naturaleza, su contaminación y derroche. Actuaciones para su aprovechamiento - Identificación y localización en diferentes representaciones cartográficas de elementos relevantes de geografía física y política del mundo
TEMA	- El agua como elemento de la naturaleza. Definición - Distribución del agua en el medio natural - Los grandes océanos de la Tierra: características relevantes y ubicación
MODELOS DISCURSIVOS	- Definir qué es agua - Explicar las propiedades del agua - Explicar la distribución del agua en la Tierra - Comparar y diferenciar los océanos - Localizar océanos en la Tierra - Solicitar información sobre agua - Dar información sobre el agua y su distribución
TAREAS	- Tablas de observación - Esquemas y gráficos - Exposición oral
CONTENIDOS LINGÜÍSTICOS	**FUNCIONES:** - Predecir usando imágenes - Definir - Describir características - Reformular frases - Construir preguntas - Expresar consecuencias - Solicitar información - Expresar opiniones **ESTRUCTURAS** Have something to do. **Comparatives:** bigger than, deeper than... easier, colder. **Superlatives:** the smallest, the shallowest. **Connectors:** even, in addition **Verbs:** to stretch,to remain, to rise**,** to fall, to spread out, to lie **LÉXICO:** Underneath, below, above, **Nouns:** Waves, tides, salinity, swamps, link, bond, supply, researches, shores **adjectives:** Superb, wide, awesome, giant, excellent, amazing, huge, massive.
CRITERIOS DE EVALUACIÓN	- Sabe definir qué es el agua - Define qué es hidrosfera - Conoce la importancia del agua para la vida - Realiza, interpreta y utiliza mapas teniendo en cuenta los signos convencionales y escala, ubicando los cuatro océanos del mundo correctamente - Interpreta gráficos

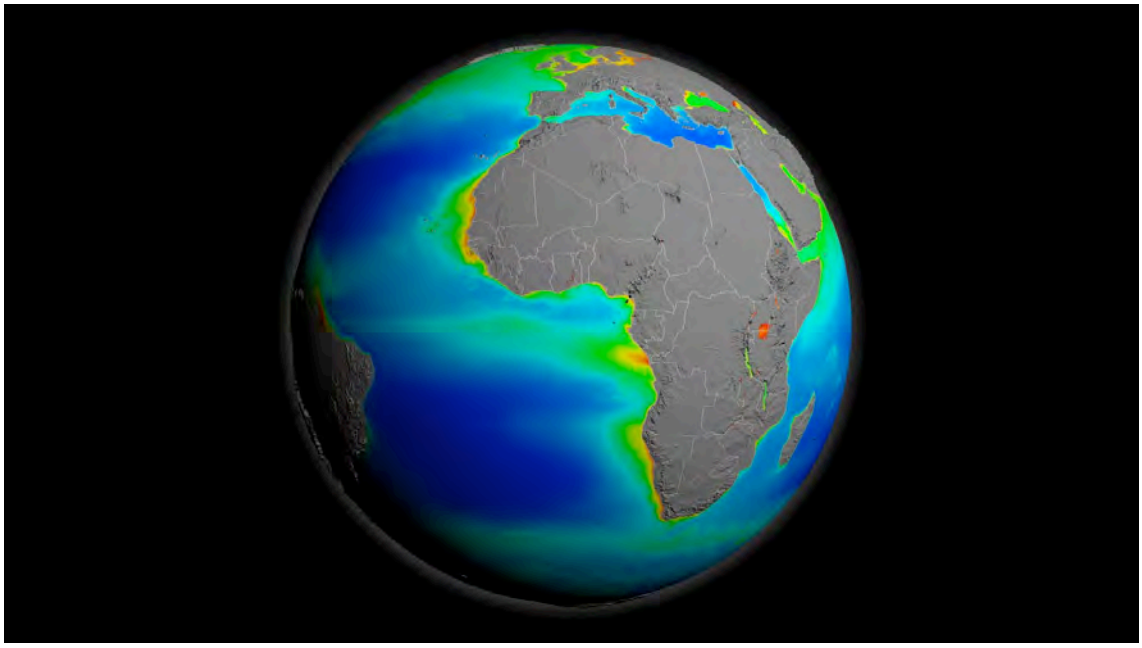
The hydrosphere

6º de PRIMARIA

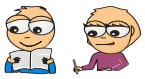
1. The hydrosphere

The hydrosphere is the part of our planet made up of water The word "hydrosphere" comes from the old Greek "hydro" meaning water. All the words with "-hydro" have something to do with water.

We can define Hydrosphere as the combined mass of water found on, under, and over the surface of a planet. That is: Oceans, seas, lakes, rivers, ponds, ice, clouds, etc…



1) Complete the following chart:

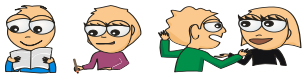


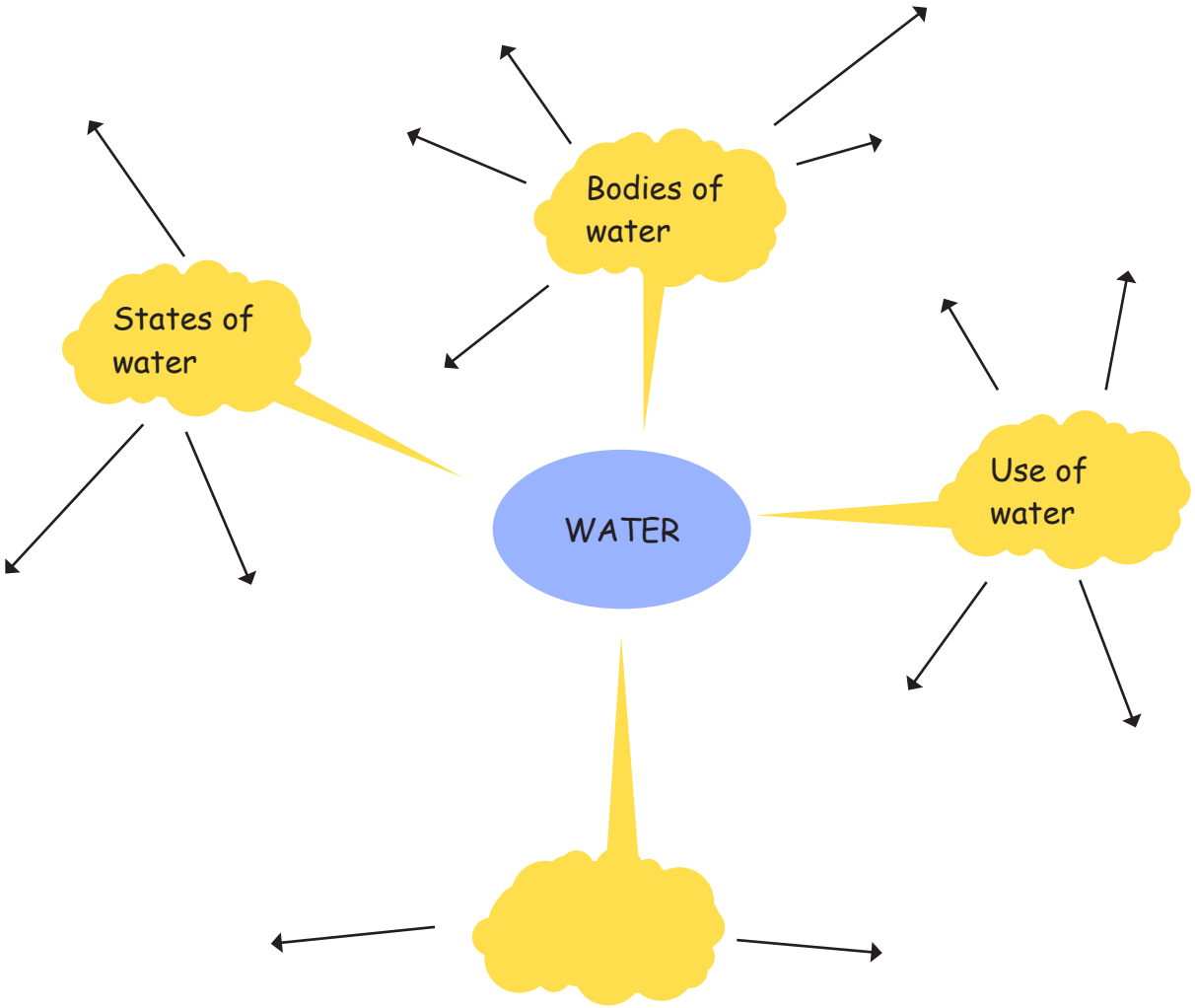
Water on the Earth's surface	Water under the Earth's surface	Water over the Earth 's surface

2) Circle the words related to water either by its form or its meaning:

hydroelectric, flood, rock, rain, hydrate, electricity, drought, ice, tributary, land

3) Work in groups. Fill in the diagram and add new bubbles and arrows:





2. What Is Water?

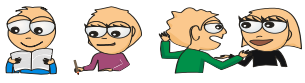
Have you ever heard someone call water H_2O?

Why do you suppose people call water by this name? What is water? Water is a basic molecule made up of two parts of hydrogen and one of oxygen. When these three parts come together they form a strong link that is difficult to break.

The strength of this link remains for millions and even billons of years. Water is one of the most common substances on the Earth. Covering over 70% of the surface of the Earth, it is easy to find. Even in a desert, it is not hard to find water, if you know where to look.

Scientists believe that the amount of water on Earth does not change appreciatively over time. In other words, the amount of water that is on the Earth today is the same amount that was on the Earth during the reign of the dinosaurs.

4) Answer true or false:



Water is one of the most common substances on our planet.	
Water covers more than half of the Earth.	
A molecule of water is made up of two parts of oxygen and one of Hydrogen.	
The amount of water on Earth changes through the time.	
There is no water in the desert.	

3. Why is water so important?

Some of the Earth´s water supply is temporarily inside life forms in the Earth´s biosphere. This water makes up a big part of certain organisms and is important because it makes life possible. Some organisms are made up of 95% water, while almost all are more than half water. You are more than 60% water.

5) Complete the sentences:

- Water is so important because it makes _____ possible.

- _____ are more than 60% water.

- Some of the Earth´s water_____ inside living things.

4. Important characteristics of water.


Water is the only substance on Earth that **is in liquid form** at the temperatures commonly found on the Surface of our planet.

Water is a superb **solvent**, meaning that other substances regularly and easily dissolve into it. This allows water to carry nutrients to cells, and carry waste away from them.

In addition, water has the unique **property of expanding as it freezes**. Because water expands becoming less dense, frozen water, or ice floats. This is very important, because it protects the water underneath, isolating it from freezing.

6) Work in pairs. Match the questions with their answers:

What property does water have that other liquids don't?	Because floating ice protects the water underneath from freezing
Why do oceans never completely freeze?	It expands as it freezes.
What happens to water when it freezes?	Water is an excellent solvent
What is the most important property of water?	Because this allows water to carry nutrients to cells and carry waste away.
Why is water -being a super solvent- so important for life?	It becomes less dense and floats.

7) Read the following sentences:

- Water is a liquid.

- Water is transparent.

- Water is essential for life

- Water is made up of two parts of hydrogen and one part of oxygen.

- Water is inside many living things.

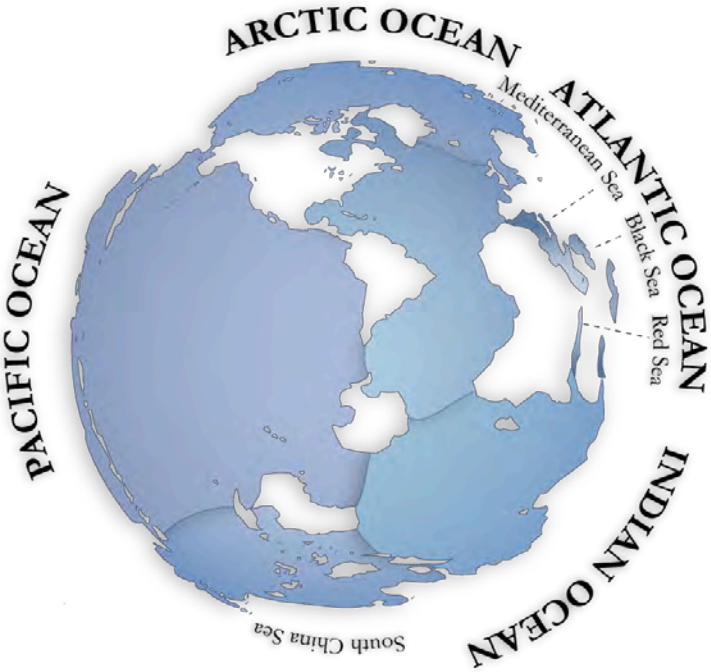
8) Write your own definition of water linking all of the definitions above.

Water is.....

5. Oceans Divided

Because most of the Earth´s water is found in the oceans, in order to understand the hydrosphere, we must understand these massive bodies of water. Fortunately, this is easier today than ever. Modern technologies allow scientists to study the oceans in detail.

The great seas of the Earth are generally divided into four distinct oceans. These oceans are the Pacific Ocean, the Atlantic Ocean, The Indian Ocean, and the Arctic Ocean.



As you can see in this image, the oceans are connected, forming one large ocean. Water from one of the four oceans is free to move into another ocean. Whales, fish, and other life forms from one ocean are free to travel to another.

In addition to the four oceans a number of seas, bays and gulfs exist. These are generally just smaller portions of one of the larger oceans.

The largest of all the Earth´s oceans, the Pacific **Ocean**, covers twice as much space as any other ocean, and more space than all the continents put together. The Pacific Ocean is notorious for bad weather and powerful storms that occur in its waters.

The Atlantic Ocean stretches from the Arctic Ocean to the shores of Antarctica. This makes it the same size from North to South as the Pacific Ocean, but from East to West, the Atlantic Ocean is only about half as wide as the Pacific.

The Indian Ocean lies between Africa on the west, Australia on the east, Asia on the north, and Antarctica on the south. 90% of this ocean lies to the south of the Equator.

The Arctic Ocean is both much **smaller** than the other oceans, as well as shallower. This ocean is connected to the Pacific and Atlantic oceans. This ocean is also much **colder** than the other oceans, and much of the water is covered by a frozen ice cap.

9) Make questions for these answers and ask your partner:

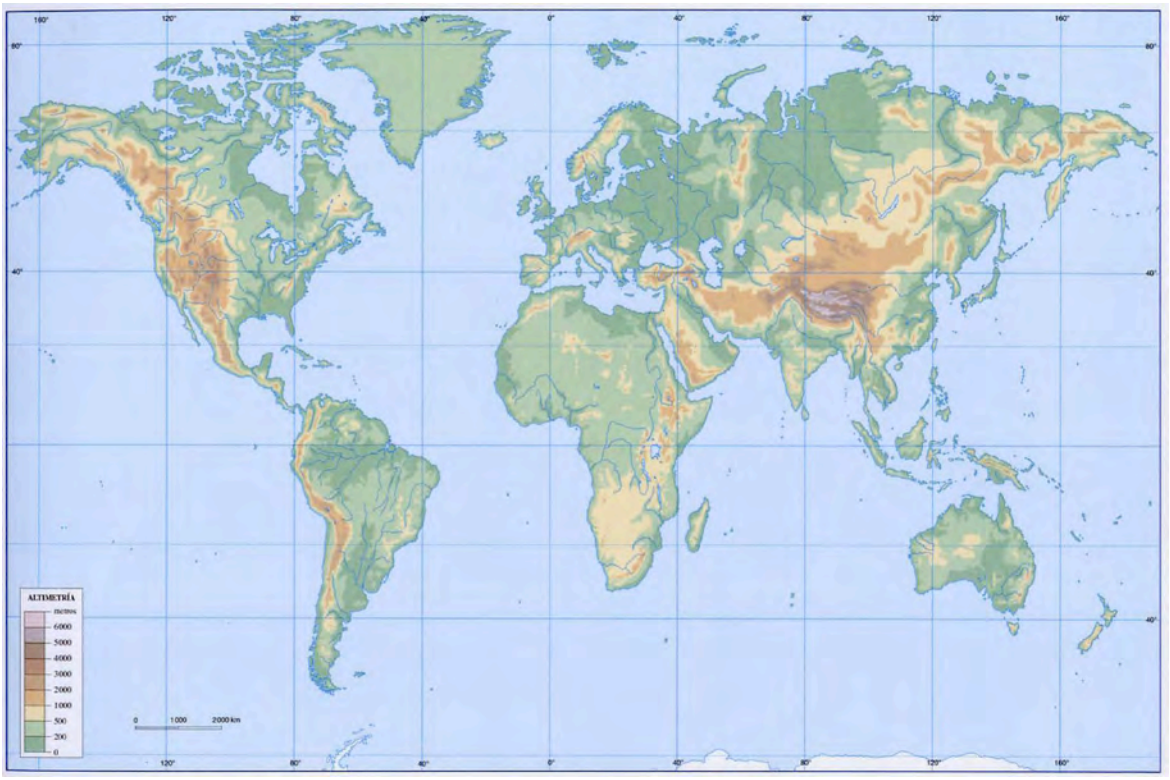
- The Pacific Ocean, the Atlantic Ocean, the Indian Ocean, and the Arctic Ocean.

- There are four oceans on the Earth.

- The smallest Ocean in the world is the Antarctic Ocean

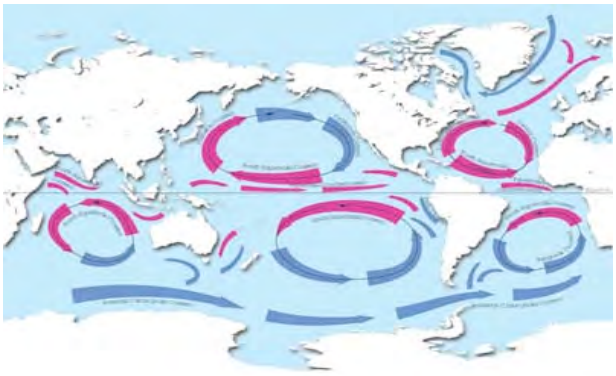
- The largest Ocean in the world is the Pacific Ocean.

10) Locate the four oceans on the map



6. Oceans movements

The water in the oceans is constantly circulating due to different movements such as:

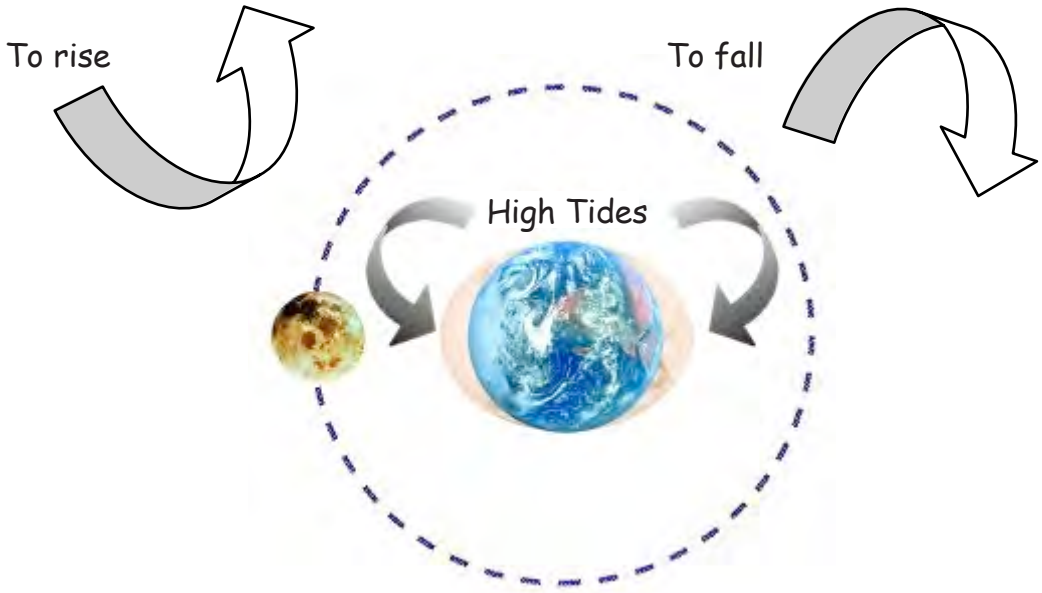


waves, currents and ocean tides. The surface of the Earth´s oceans is in constant motion, moving up and down, in the form of waves. If you have been to a beach, you have seen waves.

There are a number of ocean currents around the Earth. A current is like a big river within the ocean, flowing from one place to another. These currents are caused by differences in temperature, differences in salinity, and by wind.

7. Tides

The most important factor affecting the movement of water across the oceans are tides. Tides are movements of water caused by the gravity of the Moon and Sun. Attracted by gravity, the water moves around the Earth´s oceans, causing water levels to rise and fall. Typically water will rise for about six hours, followed by six hours of falling.



There are two high tides and two low tides a day.

After reading the texts

11) Working in groups, let's answer these questions:

- What is water made of?
- What is the chemical name of water?
- Where can we find water on the Earth?
- What is the percentage of water in your body?
- Why do you think the amount of water on the Earth hasn´t changed throughout time?
- What percentage of the Earth is covered by water?
- Name the oceans of the world.
- Which is the biggest ocean in the world?
- Which is the smallest?
- Which is the coldest?
- Which is the shallowest?
- Which ocean lies mostly in the Southern hemisphere?
- Which are the movements of water in oceans?
- What are tides caused by?

12) Discuss. Which of these animals do you think is made up of 95% of water?

Why do you think so?

12) Work in pairs and put the words in the right column depending on their meaning.

excellent, bond, gigantic, fantastic, connection, great, awesome, giant, tie, enormous, amazing, huge.

Link	Massive	Superb

13) Match the words and phrases with their meanings.

IT IS HARD	NOT VERY DEEP
REMAIN	BELOW
SHALLOW	STAY
UNDERNEATH	IT IS DIFFICULT

14) Think about this paragraph from the text:

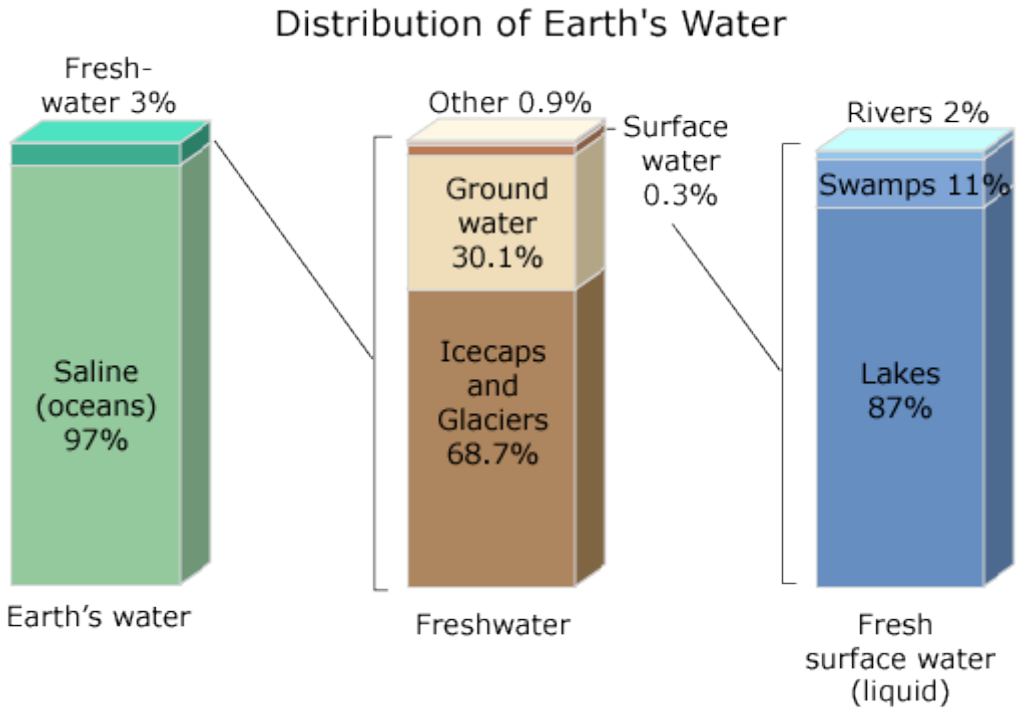
"Water is a superb solvent meaning that other substances easily dissolve into it, this allows water to carry nutrients to cells and carry waste away from them".

Which liquid in your body does the same?

15) Find out:

Where can we find more water, in the Northern hemisphere or in the Southern hemisphere?

16) Look at this diagram to get information to build you own graph to present to the rest of your class.



17) What does the other 0.9% represents in the brown column?

18) Complete the text.

97% of the total amount of water on Earth (100%) is salt water and the ……..% is …… water. 0,3% of the total of fresh water on the Earth is …… water, 30,1 % is …… water and most part of fresh water on Earth -……%- is in solid state. Taking into account just the fresh water on the Earth´s surface, the 87% is …….. , 11% …….. and only ……. is inside swamps.

19) Compare the total amount of salt water and fresh water on Earth.

- What is the difference between them?

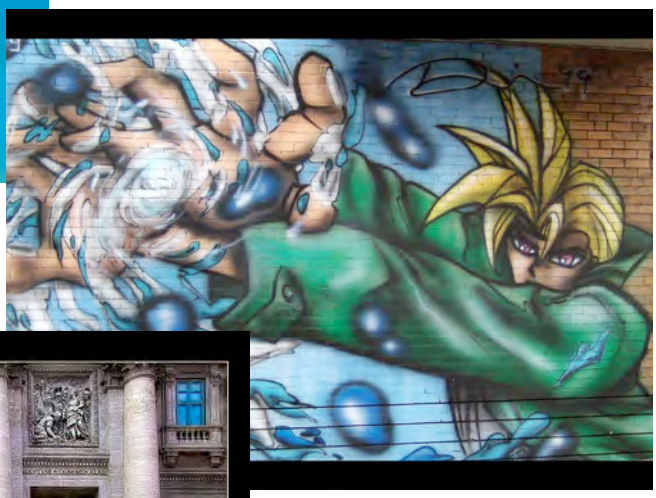
- Can we use all the fresh surface water? Why?

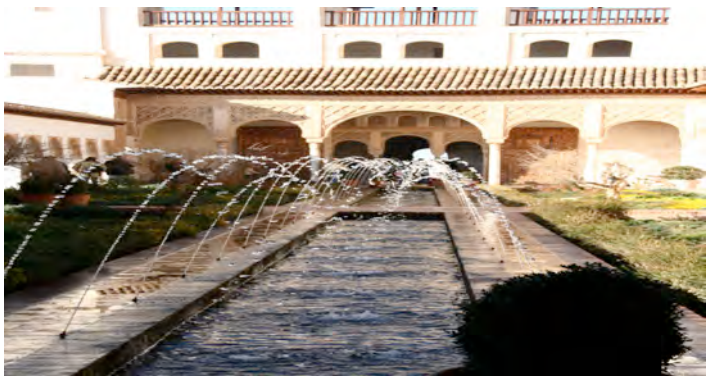
- Do you think there is a lot of fresh water on Earth?

- What do you think is the meaning of "Water is a limited resource?"

8. Water in art

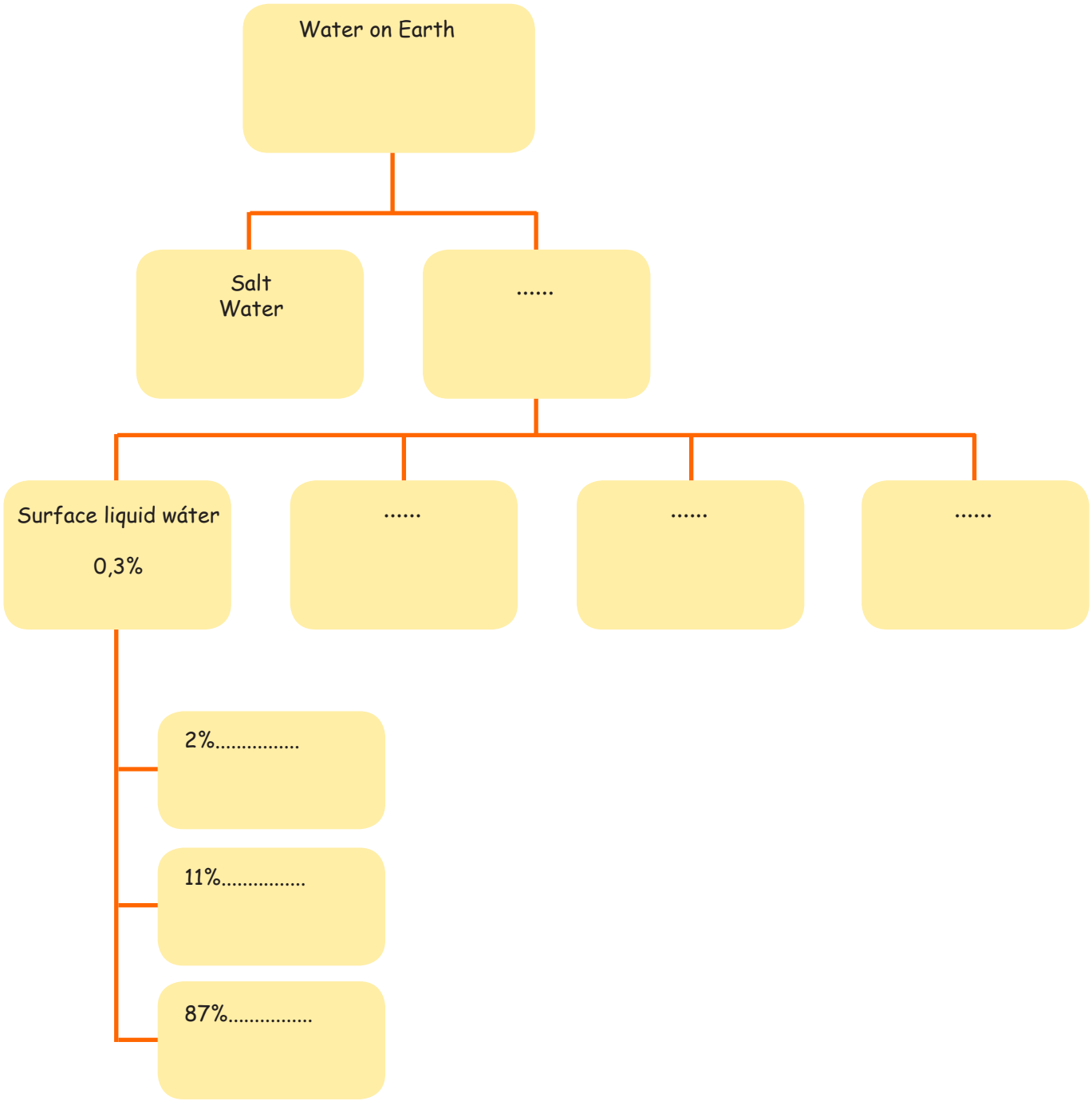
Water has been present in lots of works of art throughout human history; Paintings, photographs, fountains and gardens are examples of the importance of water in art.





20) Find pictures on internet like these representing how water is present in art. Write the name of the work of art and who made it.

21) Now make your own diagram, and present it to your classmates



Self evaluation sheet 

Name: _____
Date: _____

After working on this unit: (circle the right smiley)

- I know how to define water. 
- I know why water is so important for life. 
- I know what the hydrosphere is and what it is made up. 
- I can locate all of the oceans in the world and name some of their characteristics. 

My work on this unit:

- Was excellent 
- Was good 
- Not bad 
- I have to work more 

The Unit was:

Nice/cool 

ok 

a bit boring 

Self assessment. Tick your progress in this unit.

				
	I can recognize words and expressions related to the content of the lesson.			
	I can understand the most important information in the texts in the lesson			
	I can speak about different themes in the lesson.			
	I can talk to my classmates about the lesson topics.			
	I can write short texts about the lesson topics.			