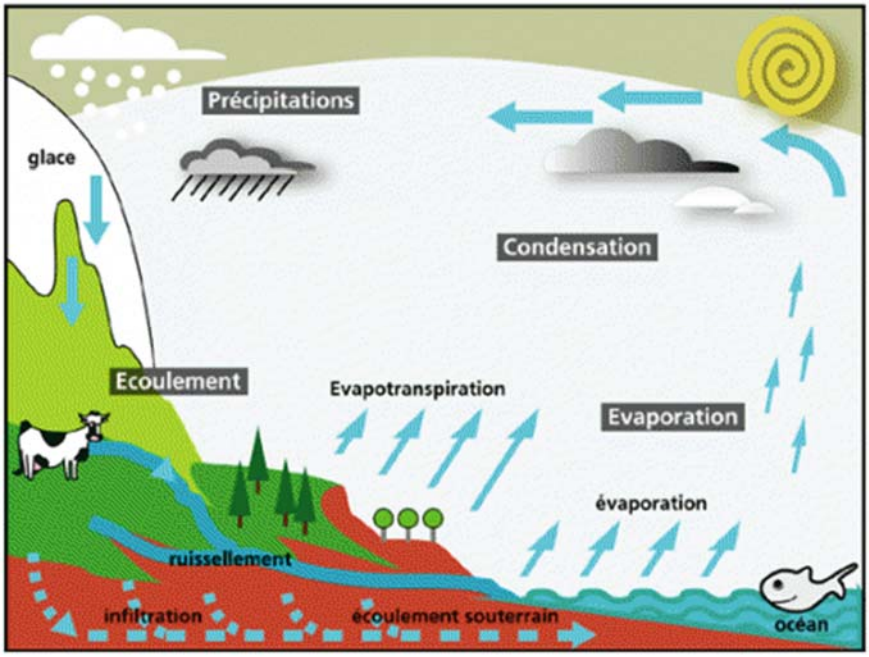
The water cycle

Title	The water cycle
Content/ Key words	Resource
Description	Water appeared on Earth about 4 billion years ago. Only 28% of the surface of our planet is not covered by water. Its volume (around 1,4 billion cubic kilometres) is keeping generally stable: the same water is in circulation and transforms permanently through the water cycle. Indeed, water changes states and exists on earth under three different states: liquid, solid and gaseous. **Liquid state** (clouds, water streams, seas, oceans…) Condensation: when in contact with colder layers of the atmosphere, water vapour condenses in tiny droplets which gather together and form clouds, which are at the origin of precipitations. **Solid state** (Ice) Solidification: because of negative temperatures, water transforms into ice. **Gaseous state** Evaporation: Heated by the sun, the water from the oceans, rivers and lakes evaporates and goes up in the atmosphere. It is described as water vapour. Water is divided as follow: ● 97,20%: salty water ● 2,15 %: polar ice ● 0,63 %: underground water ● 0,019 %: surface water (lakes, rivers) ● 0,001 %: water in the atmosphere Water renews itself with variable speed: 1000 years for a groundwater table, 4000 years for an ocean, 15000 years for a glacier. By renewing, we

	understand the average time that is necessary for a stocked volume in a reservoir, at a given time, to be entirely replaced by upcoming water supplies. Only 0,65% is neither salty nor icy and 97,2% of the water of our planet is salty (seas and oceans). However, only freshwater (of which only a part is easily usable) is used for the humans' vital needs (food, agriculture…). We estimate that more than 80 countries in the world (i.e. more than 40% of the global population) are facing major water droughts.
Link to a national support by country	Croatian: ● { HYPERLINK xxxxxxxxx} For the links, when you past them must appear { HYPERLINK xxxxxxxxx} That shows that the link is working, even when it past in PDF or on internet. Greek: ● Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx ● Xxxxxxxxxxxxxxxxxx Italian: ● Xxxxxxxxxxxxxxxxxxx ● Xxxxxxxxxxxxxx French: ● https://physique-chimie-college.fr/cours-5eme-chimie/les-changements-detat-dans-la-nature-le-cycle-de-leau/ ● https://www.pccl.fr/physique_chimie_college_lycee/cinquieme/cours_exercices_corriges/eau_nature.htm
	sheet n°2: My environment is changed sheet n°9: Drawing your climate reality sheet n°15: Activity to design an ecological house model Sheet project J: Waterap



Source *Dossier CNRS sur le cycle de l'eau*