



**Activity title:** "The Ocean, climate regulator"  
**SNAKES & LADDERS**  
 Yellow pack of cards

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**Audience:** Family  
**General goal of the activity:** To realise that the Ocean helps to regulate the climate.



Sequence and place	Specific goal	Message	Discovery process or activity	Learning style	Material or object to be shown	Length
Introduction after throwing the dice and showing the picture: "The Ocean, climate regulator"	<ul style="list-style-type: none"> <li>. Make the participants want to discover a service rendered by the Ocean.</li> <li>. Motivate all the participants.</li> <li>. Make them curious</li> <li>. Encourage questioning in the group</li> </ul>	<p>Welcome!</p> <p>I want to help you discover the benefits that the Ocean brings us.</p> <p>We chanced on this face of the dice bordered with yellow.</p> <p>What does it evoke for you?</p> <p>Here is one of the first services the ocean offers us.</p> <p>What is it?</p>	<p>Get one of the participants to throw the giant dice.</p> <p>Ask the participants about this "beneficial effect" of the Ocean.</p> <p>Start the game of Snakes &amp; Ladders.</p>	<p>Playful</p> <p>Exchange of views</p>	<p>The dice</p> <p>+ picture</p>	30 sec
Presentation of the game of Snakes & Ladders	<ul style="list-style-type: none"> <li>. Make the participants want to play the game to find the answers</li> </ul>	<p>By looking at this planisphere and playing by advancing from one square to another, we are going to see what this service offered by the ocean is?</p>	<p>Game of Snakes &amp; Ladders with six squares laid out on a planisphere representing the circulation of the ocean currents.</p> <p>We advance through each square. For each square, present a challenge, a quiz or complementary information.</p>		<p>Planisphere game-board.</p> <p>One piece (A Limpet piece for example)</p> <p>6 "Question" cards</p>	
Square 1	<ul style="list-style-type: none"> <li>. Present reliable information</li> </ul>	<p>It's very hot at the equator, its very cold at the poles; thanks to the Ocean currents (global ocean conveyor belt) the Ocean spreads the heat all around the world. They are in a permanent state of exchange with the atmosphere.</p>	<p>Challenge: there are warm currents and cold currents in the Ocean. Show us the warm currents and the cold ones. (Always start with the activity, then complete the information with the message.)</p>			

Square 2	. Show that the greenhouse gases increase with human activity.	With the development of human activities (travel, food, heating, etc.), the amount of greenhouse gas (CO2) increases.	Quiz: what are the human activities that emit greenhouse gases? . Riding your bike, . Driving your car, . Walking			
Square 3	. Show a first beneficial effects of the Ocean: it absorbs CO2	The Ocean absorbs about 25% of our CO2 emissions in two different ways: physically (simply by dissolution of the gas in the water) and biologically (absorption of gas by seaweed and phytoplankton).	Info: the Ocean absorbs 25% of the carbon dioxide that we emit.			
Square 4	Show a second beneficial effects of the Ocean: it absorbs heat	If we emit increasing amounts of greenhouse gas, the Earth's temperature will rise. The Ocean absorbs 93% of this excess heat. If it wasn't there it would be much hotter. There would be even more meteorological anomalies (gales, tornadoes, storms, etc.).	Quiz: What proportion of excess heat does the Ocean absorb? - 93% of the excess heat. - 25% of the excess heat. - 50% of the excess heat.			
Square 5	Conclusion		Info: the Ocean renders us a service: it regulates the climate. Thank you Ocean!			
Square 6	. Make the audience want to act to limit our emissions	It's up to us to act to limit our emissions: soft mobility, renewable energies (solar and wind power), insulation for our homes.	Challenge: Mime what we can do to limit our greenhouse gases emissions when we travel or when we're at home.			
Openings to the other benefits	. Invite the participants to discover other benefits offered by the Ocean	Realise that the Ocean also brings us many other benefits for our health!	Show the other posters on display and (or faces of the giant dice) and invite the participants to discover another benefit of the Ocean.	Affective	Posters on display.	5 sec