Part of this heat goes

into the atmosphere.

THE OCEAN SMURFS THE CLIMATE

The sun heats

up the ocean

gen we need to breathe. We owe it

When you have a shower or

take a bath, some of the hot

water evaporates, which is

why it feels much warmer 1

in the bathroom.

surface.

The current

that flows

along the western

European costs, the

famous Gulf Stream,

brings this warmth to our

continent and thus regulates

our climate.

Weather is what we smurf every

long period of time in a

specific location.

day. Climate describes all weather

conditions smurfed together over a





THERE ARE THREE MAIN CLIMATES:

Polar climate:

Weak sun and very cold temperatures all year round

unshine and hot temperatures all year r

Temperate climate

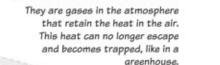
The average temperature on Earth is rising because of greenhouse gases emitted by certain human activities. his phenomenon is called global warming.

Watch out! The gases

the animals and plants

that live there sick.

smurfed by the ocean make





Is your toy still safe and dry, or is it being threatened by the rising water? by the ocean and causes acidification.





WHAT ARE GREENHOUSE GASES?



Let's Smurf

an Experiment

on Rising Sea

1) Place two piles of play dough in the bowl. 2) Add enough water so that the top part of the play dough still sticks out. Make a line to mark the water level.

3) Place your toy on one of the piles, and the ice cubes on the other. Wait until the ice cubes have melted.

(They will melt faster in the sun!)



Terrestrial glaciers are melting because of the warmer air. As a result, sea levels smurf and the beaches disappear!

@ Peyor (4)





HOW CAN WE PROTECT THE OCEAN AND HEAL THE PLANET?

We can all do our bit to reduce our energy consumption and limit the emission of gases responsible for

global warming. Take a look at the Smurfs' suggestions and ask your parents to apply them at home!

You can omurf local and

That's a solution!

You could smurf a tree, which

fruit tree, you can even

harvest the fruit!

In winter, I omurf a jumper

rather than turning up the

central heating. Even if this

one is a bit big...

will capture CO. And if it is a

seasonal vegetables. Less

transport = less pollution!

You can omurf your bike to go to places,

or organise a 'walking bus' with your

parents to get to school.









MARINE ENERGIES

We need energy to watch TV, wash our clothes, turn on the light, run our cars... Energy is mainly produced from substances found in limited amounts in the soil: coal, oil, and natural gas. The burning of these substances generates greenhouse gases.

But we can also produce energy from wind, the sun, our own muscles, and... water! These are renewable and non-polluting sources. The ocean is a huge source of renewable energy! We can create electricity









цоиг гоот.



DIFFERENCES IN

WATER TEMPERATURE

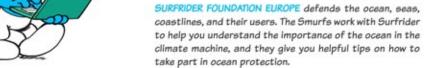
Have you ever been knocked over by a wave

at the sea shore? Imagine if this force

could be harnessed to smurf the light in







more games!

BIARRITZ





THE GAME: THE SEA IS RISING

- Gaming pieces (you can use Smurf figures if you have any)

All players start out on the ice shelf. The youngest player begins by throwing the die. Always advance

your piece by as many spaces as indicated by the die. If you land on an 'action' field, you must follow the corresponding Smurf instructions. Climate change and its consequences will make your progress harder by putting obstacles in your way. However, concrete action will help you to move forward quicker. The first player to

Reach the Smurf Village as fast as possible to help save the houses threatened by rising sea levels.

- One die

reach the village wins.



















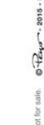












Grué, David Dada Graphic design and illustration

SURFRIDER

Now it is your

our village!

Sabina Hourcade and Smurf-team at IMPS Print: Grupo Delta

Publication director: Gilles Asenjo

Conception: Pamela Gericke, Margaux





You can play levels 2 and 3 of the game

on the internet, where you can also find

more information on how to protect the

environment, science experiments, and

www.surfrider.eu/schtroumpfrider



