

e-newspaper

2<sup>nd</sup> Primary School of S. Barbara  
6<sup>th</sup> Grade



Climate

Heroes !!!

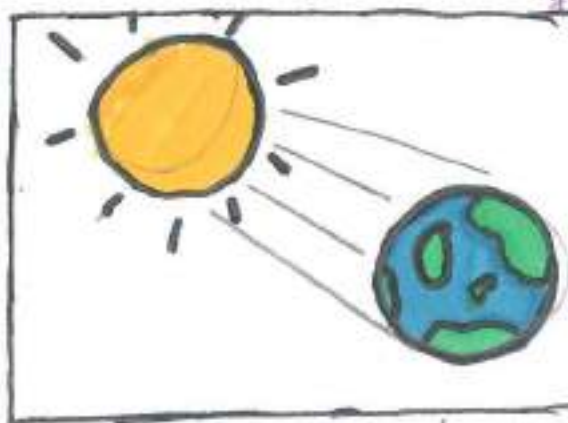
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# Climate change

Earth encounters many problems.

One of them is climate change. Human activities such as burning fossil fuels and destroying rain forests have an increasing influence on the climate and the Earth's temperature. Climate change has always existed over the course of our planet history.



The problem is bigger the past 150 years because of humans activities. It's called «the anthropogenic green effect» the last years humans with their activities pollute the environment and effects the climate with high temperatures.

High temperatures melts ice in the North and South pole.


That's a big problem because there are many polar bears live in the Arctic and they may not survive.

Alexandra Pali

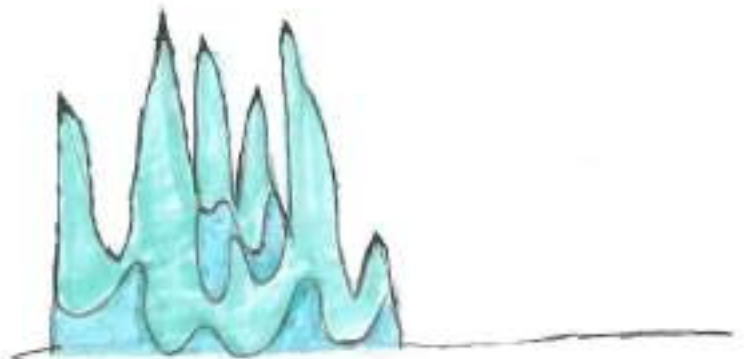
# ICE CAPS

melting

Human activities are at the root of ice caps melting. Since the industrial revolution carbon dioxide and others greenhouse gas emission have raised temperatures, even higher in the poles and as a result glaciers are rapidly melting, calving off into the sea and retreating on land



To reduce melting ice, we must act to dramatically reduce greenhouse gas emissions.



## Acid Rain

Acid rain is a phenomenon caused by **atmospheric pollution** in which quantities of mainly sulfuric and **mother acid rich** the ground in liquid form, carried by rain, snow, hail, etc., with devastating effects on **flora** and **fauna** as well as buildings and monuments. The **problem** of acid rain started to become particularly intense from the 70s onwards.

### Την καταστροφή των δασών



# FOREST

## FIRES



### Forest Fire Prevention Tips

- Obey local laws regarding open fires, including campfires.
- Keep all flammable objects away from fire. Scrape away leaves, twigs and grass within a 10-foot diameter circle from fire.
- Have fire fighting tools nearby and handy.
- Never leave a fire unattended.
- Carefully dispose of hot charcoal.
- Drown all fires.
- Carefully extinguish smoking materials.

Angel kaleas  
Mikoleta Sotiniou  
Chrysovalantis Mitohidis

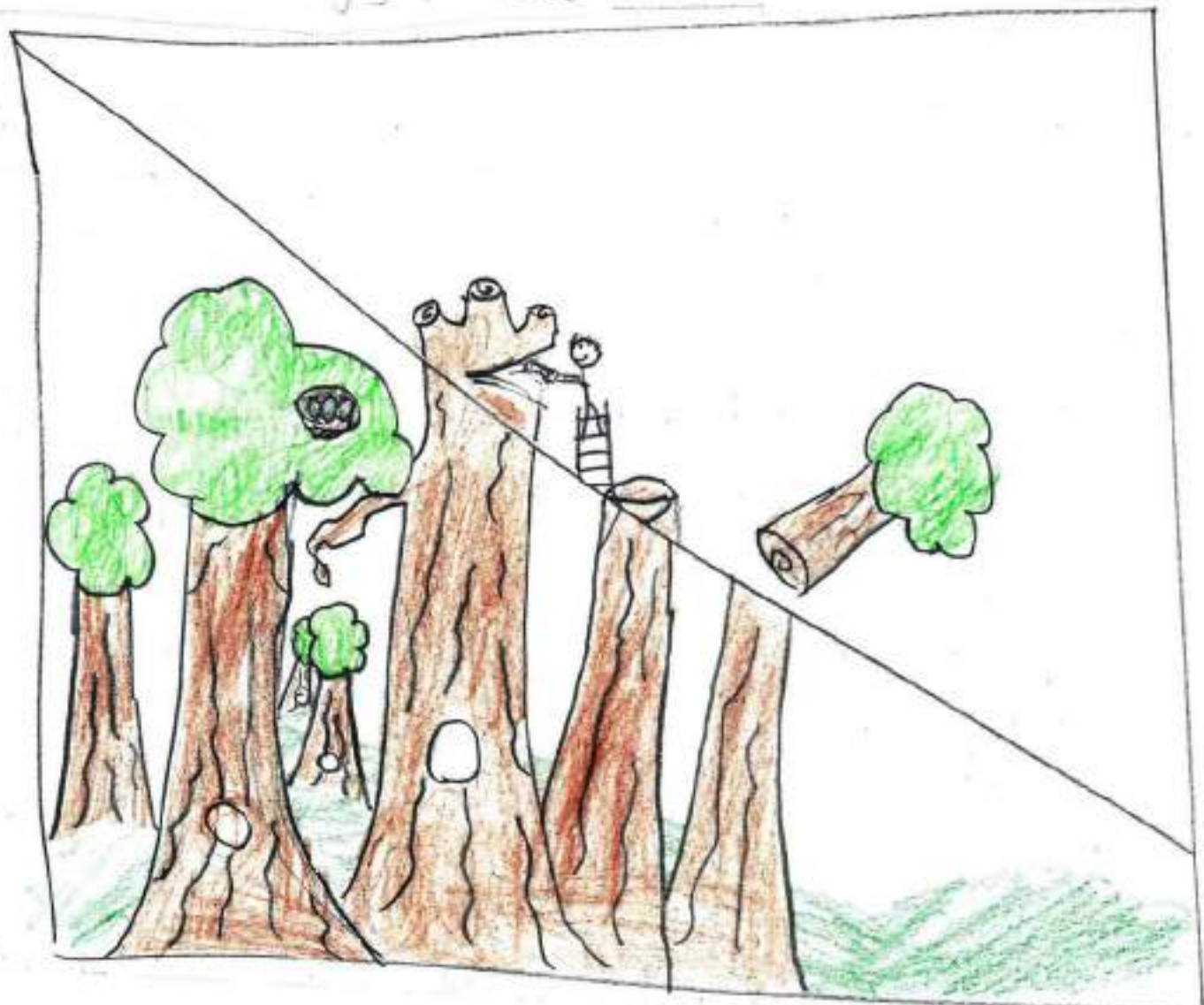
# DEFORESTATION

What is deforestation and its effects?

Deforestation can be defined as the large-scale removal of trees from forests (or other lands) for the facilitation of human activities.

It is a serious environmental concern since it can result in the loss of biodiversity, damage to natural habitats, disturbances in the water cycle, and soil erosion.

Angela Tsigdopoulos



## WATER POLLUTION

Water pollution is the contamination of water sources by substances which makes the water unusable for drinking, cooking, cleaning, swimming and other activities. Pollutants include chemicals, trash, bacteria, and parasites. All forms of pollution eventually make their way to water.

These substances do not always change the color of water, meaning that they are often invisible pollutants.

### HOW TO STOP WATER POLLUTION

- If you can, pick up litter and garbage by hand, and take it to your personal garbage can before it travels into local water ways.
- Never put chemicals down the drain. Place them into your outside garbage can or take them to the local authorized centers.
- Wash your car where the wash and soap can go to a dirt or grass area instead of a street and drain to the river or creek.

Miholeta Swtiriou  
Evangelia Dimitriou  
Irene Dantili  
Helen Lazarou



# ENDANGERED SPECIES

## Axolotl:

Sadly, most of them live in pet shops and home aquariums. In the wild however, axolotls have become critically

endangered and are on the verge of extinction! There are only 50-1,000 axolotls left in the wild. The leading causes of this are, human development, waste water disposal, and loss of habitat due to droughts!



# ENDANGERED SPECIES

## Jackal

The jackal is a medium-sized omnivorous mammal of the genus *Kyon*. Only 3 different species are called jackals. The golden jackal, the striped jackal and the black-necked jackal.



The last two species are related to each other, but the first is related to wolf, african wolf, golden wolf, Ethiopian wolf and coyote. We can find the golden jackal in Europe and in Asia. In Greece it is an endangered species and is found mainly in Kerkini, Halkidiki, Phocis, Samos, Peloponnese, Attica, Eastern Macedonia and Thrace while it has disappeared or is very rare in places where it was common decades ago. The other two species of jackal live in sub-Saharan Africa.

«The WWF's action for the golden jackal in Greece»

2000-2002

Greece's WWF created a pan-Hellenic record of jackals, which was completed in 2004.

2010

WWF continues its registration in Evros region for the protection of the threatened species in all regions of Greece

2008-2009

In the period of 2008-2009 WWF with Kallisto created a program to record and measure the population of jackals in Peloponnese and Halkidiki. Their purpose was to preserve the jackal's species in Greece.

ΣΤ2

Stellina ♡  
Chaldatai

## Red Deer

The red deer (*Cervus elaphus*) is the largest herbivore in Greece and definitely one of the most popular species of the Greek forests.

### The Life of the Red deer

Red deer have had a continuous presence in Greece since as early as prehistoric times. As natural grazers they have always played an important part in the base of the food pyramid.

### Life under Threat

Red deer used to live throughout the Greek mainland. In only a few decades, their populations have been depleted so dramatically that the species is now considered critically endangered according to the Red Data Book of Threatened Animals of Greece.

### The WWF Project for the Protection of the red deer

WWF Greece advocates for improvement and implementation of legislation concerning hunting, trading and trafficking as well as keeping animals in captivity and releasing them to the wild. The creation of a wildlife medical care center is also of vital importance.



# Endangered Species



## TIGERS

The tiger is one of the world's most recognizable animals, intimately connected with strength and untamed nature. A symbol of nature's wild places, significant in faiths and folktales of almost all civilizations, tigers inspire millions of people around the globe, from the monasteries in Bhutan to the catwalks of Milan.

Sadly, tigers are on the brink of extinction. Just over a century ago, 100,000 wild tigers roamed across Asia. Today, fewer than 3,900 live in a mere four per cent of their historic range. The largest tiger population can now be found in India, home to half of all remaining wild tigers. Much of this decline has occurred in the past decade.

After a century of decline, overall wild tiger numbers are starting to tick upward. Based on the best available information, tiger populations are stable or increasing in India, Nepal, Bhutan, Russia and China. About 4,500 tigers remain in the wild, but much more work is needed to protect this species if we are to secure its future in the wild. In some areas, including much of Southeast Asia, tigers are still in crisis and declining in number.



## White tiger (Endangered species)

The white tiger, or bleached tiger, is a leucistic pigmentation variant of the mainland tiger. It is reported in the wild from time to time in the Indian states of Madhya Pradesh, Assam, West Bengal, Bihar, Odisha, and in the Sundarbans region and especially in the former state of Bengal. It has the typical black stripes of a tiger, but carries a white or near-white coat.

The white Bengal tigers are distinctive due to the color of their fur. The white fur is caused by a lack of the pigment pheomelanin which is found in Bengal tiger with orange fur.

The white Bengal tiger tends to grow faster and heavier than the orange tiger and they also tend to be somewhat bigger at birth. White Bengal tigers are fully grown when they are 2-3 years of age.

For a white Bengal tiger to be born, both parents must carry the recessive gene for white coloring which only happens naturally about once in 10,000 births. Their rarity is the result of a one-time mutation or because they lack adequate camouflage, reducing their ability to stalk prey or avoid other predators.

**Dimitra Theochari**

## Caretta caretta turtle

The loggerhead sea turtle (*Caretta caretta*) is a species of oceanic turtle distributed throughout the world.

Approximately 60% of the nests created by loggerhead turtles in total are in our country, since they return annually to the same beach where they lay their eggs.

Only one in 1000 baby turtles will survive according to WWF

The loggerhead turtles lay their eggs mainly in two areas of our country. On the six spawning beaches of the Zakynthos National Marine park in the Gulf of Laganas western Peloponnese

Unfortunately, the byproducts of unregulated fishing and over-tourism development (such as litter, nets and hooks from fishermen's lines) on the beaches where *caretta* spawn have increased the threats they face



# What are the solutions to climate change?



- keep fossil fuels in the ground
- Invest in renewable energy
- Switch to sustainable transport
- Improve farming and encourage vegan diets
- Restore nature to absorb more carbon
- Protect forests like the Amazon
- Protect the oceans
- Reduce how much people consume
- Reduce plastic



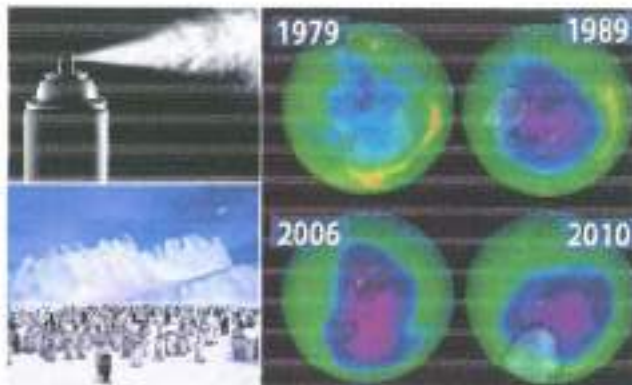
Save our  
PLANET  
Save our  
FUTURE

ST<sub>2</sub> Nikoletta Mochaira

# PROTECT THE ENVIROMENT

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## Ozone



Ozone, or trioxygen, is an inorganic molecule with the chemical formula  $O_3$ . It is a pale blue gas with a distinctively pungent smell. It is an allotrope of oxygen that is much less stable than the diatomic allotrope  $O_2$ , breaking down in the lower atmosphere to  $O_2$  (dioxygen).

As we can see at the picture, Ozone gradually decreases and holes are formed. But this isn't good because Ozone protectus from the Sun toxins, without

that we will have the greenhouse effect, Antarctic ice will melt, a lot of cities will disappear from floods.

## How can we repair the Ozone?



On September 16, 1987 (since then, September 16 has been proclaimed by the UN as World Day against the Ozone Hole), 46 countries signed the Montreal Protocol, the most important and effective act to combat the ozone hole phenomenon to date. The goal of the Protocol was to phase out CFCs other ODS (Ozone Depleting Substances) such as Hydro chlorofluorocarbons (HCFC) and Methyl Bromide ( $CH_3Br$ ) to address the problem of ozone depletion, which had been discovered two years ago. A timetable was also set for the restoration of the already depleted ozone.

Any country that signs the protocol is automatically obliged to stop the production and consumption of CFCs. With the cooperation of the European Union, 99% of household chlorofluorocarbons have been phased out, while at the same time it aims with legislation (such as that of 2006) to regulate the use of fluorinated gases by industries, which also destroy the ozone layer. In the summer of 2009, the implementation of the Montreal Protocol became universal, as the last of the 196 UN member countries signed it. Recently the UN presented a report entitled "Scientific Assessment of Ozone Depletion 2010" on the state of the ozone hole, according to which the news is extremely welcome. The ozone hole has now stopped growing, a change which has also contributed to the reduction of global warming, since this is a consequence of the phenomenon. Although the results of the report are encouraging, the recovery of the ozone hole has not yet started at a satisfactory pace. According to calculations, ozone levels will have reached those of 1980 around 2075 according to 2015 estimates.

# Carbon Footprint

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## What is carbon footprint?

A carbon footprint is the total amount of greenhouse gas emissions, measured in terms of carbon dioxide, emitted over the life cycle of a product (including its production, distribution and use, as well as its final disposal) or that caused by a certain population or system of activity. The aim is to determine the environmental performance of the business organization. The environmental performance refers to the total amount of greenhouse gas emissions (carbon footprint) from the processes included in the system under study.

## How you can reduce your own carbon footprint

If we know what our carbon footprint is, we will be able to help limit the impact of our consumer choices on the environment. On the internet there are several ways to calculate your own carbon footprint.

Small changes can have big long-term effects when it comes to transport, food, clothing, waste, etc. for example. Here are some tips:

### Food

- Eat local and seasonal produce (no strawberries in winter!)
- Limit your consumption of meat, especially beef.

- You choose fish from sustainable fisheries .
- For your shopping you can use bags made from recyclable materials and avoid products with excessive plastic packaging .
- Try to buy only what you need, so you don't waste food .

## Clothing

- Take care of your clothes .
- Try to trade clothes, lend your own or borrow or buy second-hand .
- Buy clothes that have been made responsibly, e.g. from recycled material or with an eco-label .



## Transportation

- Use the bicycle or public transport .
- Think smart: when and how you drive .
- Try the train for your next holiday .

## Electricity and garbage

- Lower the heating by 1°, even that will make a difference .
- Don't sit too long in the shower .
- Turn off the water when brushing your teeth or washing dishes .



- Unplug electrical appliances and don't let your phone charge when the battery is full.
- Don't store unnecessary data in the cloud (be aware of your digital footprint!).
- Choose high energy efficiency products with the "A" mark (EU energy label).
- Limit your trash and learn to recycle it .

**Thank you so much for your time!!!**

Made by: John Kostas

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# RECYCLING

Recycling is a very beneficial action with many advantages. We can all recycle many materials if we really want to. In my opinion, we should all keep in mind that planet Earth is slowly dying because of us. So we must start recycle before it's too late.



Mary Papadopoulou

# PLASTIC RECYCLING

Plastic is a useful material, but it is dangerous to the environment. We can help the environment by recycling plastic bottles. I know that many people don't give much importance to recycling but it can greatly improve people's lives as well as the lives all organisms on Earth. Finally, we must remember that we must not do anything bad to nature because at some point it will revenge us.

## The benefits of Recycling Plastic

- Saves Landfill Space...
- Used to Manufacture Other Goods...
- Reduces Carbon Emissions...
- Saves money
- Brings People Together

Mary Papadopolou

# PAPER RECYCLING

Paper recycling saves energy and reduces greenhouse gas emissions. Paper recycling has been around for a long time. In fact, when you think about it, paper is a recyclable product from the start. For the first 1,800 years or so that paper has existed, it was always made from discarded materials.



**WHAT ARE THE MAIN BENEFITS OF PAPER RECYCLING?** Recycling paper conserves natural resources, saves energy, reduces greenhouse gas emissions and keeps space free from landfills for other types of trash that cannot be recycled. Recycling one tone of paper can save 17 trees, 7,000 gallons of water, 380 gallons of oil, 3.3 cubic meters of landfill space and 4,000 kilowatts of energy - enough to power the average US home for six months - and reduce greenhouse gas emissions by one metric ton of carbon equivalent.

## HOW MANY TIMES CAN THE SAME PAPER BE RECYCLED?

Paper recycling has limits. Each time paper is recycled, the fibers become smaller, weaker and more fragile. In general, paper can be recycled up to seven times before being discarded.

**PAPER  
RECYCLING**



# Glass Recycling

Let's think about recycling for a moment!

The production of glass requires a great waste of energy. In parallel, when we recycle:

- We protect nature
- We reduce oil consumption
- Environmental pollution is reduced.

Recycling glass is one of the easiest ways to do your bit to help the environment. There are many advantages to recycling your glass containers and bottles, since it can be infinitely recycled without losing any of its properties or its original quality. In this article, we explain how to properly recycle your glass items.

What is glass recycling?

Glass is a very useful material for our packaging because it is very easy to recycle. Glass can be 100% recycled indefinitely without losing its original quality and property. On the contrary, plastic can only be recycled 2 to 3 times because beyond that it loses its quality and resistance. Thus, glass containers are an ideal alternative to plastic containers in the food industry.

Can all glass be recycled?

Not all glass can be recycled in your recycling bin at home and you will need to look for alternatives such as a glass recycling company or take it to your local recycling centre. This is because not all glass melts at the same temperature meaning that if these items get into the glass recycling process, it could cause problems.



Go green and save the planet!!!

# aluminum recycling

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## The benefits of aluminum recycling

Aluminum recycling has significant benefits for the environment, society, country and consumers. Aluminum is an ideal material for recycling because it is easily separated from other materials and thus its sorting does not require high costs, while its recycling is a process that can be repeated without degrading its properties.



Aluminum recycling has significant benefits for the environment, society, country and consumers.

The recycling of aluminum cans achieves:

- by 95% energy savings compared to the energy required to produce primary aluminum from mineral (bauxite)
- saving raw materials, as for every ton of aluminum four tons of bauxite are required
- reduction of carbon dioxide emissions
- reducing the volume of waste (it has been calculated that if all cans were recycled we would need 2.5 million less waste containers)
- upgrading the environment (cleaner environment for a better quality of life)
- creating new jobs

We can all actively contribute to the recycling of aluminum cans, participate in upgrading the environment and win.



👉 *My dream planet* 👈

