

UNIT 3

ENGLISH: BETWEEN THE MYTH AND REALITY OF CLIMATE CHANGE

LESSON DESCRIPTION

This lesson will allow the students to learn about mitigation of the climate change. These may apply the comprehension skill.

**APPLICATION OF THE LESSON PLAN**

The lesson plan corresponds to the Unit 2.3 of English. The plan should be used following a discussion on the character characteristics and the problem solving.

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STANDARDS AND INDICATORS

- Speaking: the student plan and execute briefly oral presentations on a variety of topic (2.S.6)
- Writing: the student collaborate with peers to drawn and write literary text; uses more frequently grade appropriate words (ex. Common words lists “Dolch”) to write simply sentence. (2.W.3)

LEARNING OBJECTIVES

- Recognize the effects of climate change.
- Remember the human actions that promote the mitigation of the climate change.
- Interpret the readings.

TEMPORALITY

Start (5 minutes)	Development (50 minutes)	Closing (5 minutes)
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MATERIALS

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| <ul style="list-style-type: none"> • Computer with CD • Digital project • Video (available in the CD) • Brown paper (size to make one cape per subgroup) • Glues | <ul style="list-style-type: none"> • Scissors • Crayons • Markers • Magazines, book of pictures, images (related to human mitigation activities) |
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VOCABULARY

- **Mitigation:** changes in the daily activities of people and in economic activities, with the aim of achieving a reduction in emissions in order to reduce or lessen the effects of climate change.

CLASS GUIDE**START**

- The teacher will present a video related to the topic of climate change. The following link corresponds to the video *Climate change (according to a kid)*:
<https://www.youtube.com/watch?v=Sv7OHfpIRfU>

DEVELOPMENT**Instructional Activities**

Explanation about the subject of the lesson: 10 minutes

- The teacher will discuss the video presented at the beginning of the lesson.

Guide questions:

1. What can cause climate change?
 2. What type of climate change are there? What is the differences?
 3. How do humans contribute to climate change?
 4. What happens from climate change?
 5. What things can we do to prevent the planet from being affected by climate change?
- The teacher will explore the student' knowledge of mitigation practices. Will explain the concept and provide examples in this regard (see Annex 1).

Creation of cape: 20 minutes

- The teacher will divide the students into groups of five members.
- The teacher will explain the instructions.

Work procedure:

1. Each group will use the brown paper to create a superhero cape.
2. In the cape they will write a short paragraph (minimum of three sentences) that explain a superpower that the cape offers to the group to combated an effect of climate change. They must identify the effect of climate change, the action of the superpower, how that action can mitigates the effect of climate change and the positive result obtained.

3. They will leave a space to write a short paragraph (minimum of three sentences) in which the group will explain an action that the neighbors of their community and/or their families can do to mitigate the climate change. In the same way, they will explain what is the expected result from the mitigation actions.
4. The groups will can drawing alluding to the proposals presented in their paragraphs. In the same way, they will can decorate the capes to simulating the cape of the superhero.
5. Each group will present their cape and will explain the content. The students must explain the difference between the two proposals presented.

Oral presentations: 20 minutes

- Each group will present its cape of superpowers, following the areas of application of the exercise.
- The teacher will can realize a discussion of the presentation for each group.

Guide questions:

1. How the presented ideas of mitigation can apply them in their communities.

CLOSING

- The teacher and the students will offer a summary of what was learned in the lesson.

ANNEXES

Annex 1. Educational resource for the teacher

Es seguro | <https://climate.nasa.gov/solutions/adaptation-mitigation/>



Responding to Climate Change

NASA is a world leader in climate studies and Earth science. While its role is not to set climate policy or prescribe particular responses or solutions to climate change, its purview does include providing the robust scientific data needed to understand climate change. NASA then makes this information available to the global community – the public, policy- and decision-makers and scientific and planning agencies around the world.



Credit: kwesi/Shutterstock.com

Climate change is one of the most complex issues facing us today. It involves many dimensions – science, economics, society, politics and moral and ethical questions – and is a global problem, felt on local scales, that will be around for decades and centuries to come. Carbon dioxide, the heat-trapping greenhouse gas that has driven recent global warming, lingers in the atmosphere for hundreds of years, and the planet (especially the oceans) takes a while to respond to warming. So even if we stopped emitting all greenhouse gases today, global warming and climate change will continue to affect future generations. In this way, humanity is “committed” to some level of climate change.

How much climate change? That will be determined by how our emissions continue and also [exactly how our climate system responds to those emissions](#). Despite increasing awareness of climate change, our emissions of greenhouse gases continue on [a relentless rise](#). In 2013, the daily level of carbon dioxide in the atmosphere [surpassed 400 parts per million for the first time in human history](#). The last time levels were that high was about three to five million years ago, during the Pliocene era.

Mitigation and Adaptation | So x

Es seguro | <https://climate.nasa.gov/solutions/adaptation-mitigation/>

Because we are already committed to some level of climate change, responding to climate change involves a two-pronged approach:

1. Reducing emissions of and stabilizing the levels of heat-trapping greenhouse gases in the atmosphere (“**mitigation**”);
2. Adapting to the climate change already in the pipeline (“**adaptation**”).

Mitigation and adaptation



Credit: trekandshoot/Shutterstock.com

Mitigation – reducing climate change – involves reducing the flow of heat-trapping greenhouse gases into the atmosphere, either by reducing **sources of these gases** (for example, the burning of fossil fuels for electricity, heat or transport) or enhancing the “**sinks**” that **accumulate and store these gases** (such as the oceans, forests and soil). **The goal of mitigation** is to avoid significant **human interference with the climate system**, and “stabilize greenhouse gas levels in a timeframe sufficient to allow ecosystems to adapt naturally to climate change, ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner” (from the [2014 report on Mitigation of Climate Change](#) from the United Nations Intergovernmental Panel on Climate Change, page 4).

Adaptation – adapting to life in a changing climate – involves adjusting to actual or expected future climate. The goal is to reduce our vulnerability to the harmful effects of climate change (like sea-level encroachment, more intense extreme weather events or food insecurity). It also encompasses making the most of any potential beneficial opportunities associated with climate change (for example, longer growing seasons or increased yields in some regions).

Throughout history, people and societies have adjusted to and coped with changes in climate and extremes with varying degrees of success. Climate change (drought in particular) has been at least partly responsible for **the rise and fall of civilizations**. Earth’s climate has been relatively stable for the past 12,000 years and this stability has been crucial for the development of our modern civilization and life as we know it. Modern life is tailored to the stable climate we have become accustomed to. As our climate changes, we will have to learn to adapt. The faster the climate changes, the harder it could be.



While climate change is a global issue, it is felt on a local scale. Cities and municipalities are therefore at the frontline of adaptation. In the absence of national or international climate policy direction, cities and local communities around the world have been focusing on [solving their own climate problems](#). They are working to build flood defenses, plan for heatwaves and higher temperatures, install water-permeable pavements to better deal with floods and stormwater and improve water storage and use.

According to the 2014 report on [Climate Change Impacts, Adaptation and Vulnerability](#) (page 8) from the United Nations Intergovernmental Panel on Climate Change, governments at various levels are also getting better at adaptation. Climate change is starting to be factored into a variety of development plans: how to manage the increasingly extreme disasters we are seeing and their associated risks, how to protect coastlines and deal with sea-level encroachment, how to best manage land and forests, how to deal with and plan for reduced water availability, how to develop resilient crop varieties and how to protect energy and public infrastructure.

Fuente: <http://climate.nasa.gov/solutions/adaptation-mitigation/>

Additional sources of information:

- Options of mitigation:
https://www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_full.pdf
- Mitigation actions:
<http://www.parlatino.org/pdf/temas-especiales/pnuma/cambio-climatico.pdf> (p. 25)
- Videos about mitigation:
<https://www.youtube.com/watch?v=QjnV8-oo12A>

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