





"Open: Wide Minds will Find Eco Virtual STEAM Solutions towards Climate change!"

2022-1-RO01-KA220-SCH-000084942

**WP2: Role Play Unit** Save Our Green Town!





# **Role Play Unit**

#### Save Our Green town!

Role Play Unit: Climate Action in Our Community-Save Our Green

Town!

**Target Group:** Students aged 10–14

Theme: Civic Engagement to Address Climate Change at Local Level

# **Unit Description and Purpose**

This educational unit is designed to engage students aged 10–14 in an interactive and meaningful role play focused on civic participation and climate action. Through collaboration, critical thinking, and communication, students simulate a town hall meeting where they act as key local stakeholders addressing real-world

# **Purpose:**

climate issues.

- To help students understand the concept of climate change and its local impacts.
- To empower students to express their opinions and suggest solutions as active citizens.





• To support the development of soft skills such as teamwork, empathy, and public speaking.

#### What Is Climate Change?

Climate change refers to long-term shifts in temperatures and weather patterns.

While some changes are natural, recent decades have shown that human activity — especially the burning of fossil fuels like coal, oil, and gas — is the main cause of climate change today.

#### This leads to:

- Rising global temperatures
- More frequent extreme weather (storms, floods, droughts)
- Melting glaciers and rising sea levels
- Impact on food production and natural ecosystems

Children and young people are among the most affected. That's why learning about climate change and finding local solutions is essential.

# 1. Learning Outcomes:

By the end of this Role Play Unit, students will be able to:

1. Understand the impact of climate change on their local environment.





- 2. Identify local issues related to climate change (e.g. waste management, deforestation, flooding, etc.).
- 3. Raise awareness of climate change using age-appropriate visuals and examples. For instance:
  - o Compare pictures of forests before and after deforestation.
  - o Use weather charts showing temperature changes over the years.
  - Watch short videos or animations explaining the greenhouse effect.
  - Discuss posters and campaigns from young activists like Greta Thunberg.
- 4. Communicate effectively with different community stakeholders.
- 5. Collaborate with peers to develop and present solutions.
- 6. Reflect on their own responsibility and potential to act as climate heroes.

# 2. Guidance for the Teacher in Preparation for the Role Play:

- Duration: 2 sessions (60 minutes each)
- Group Size: 4–6 students per group
- Materials: Flipcharts, markers, name tags, character cards (provided below), internet access for research.
- Preparation Steps:
  - 1. Familiarise yourself with the role play structure and objectives.
  - 2. Print character cards and stakeholder descriptions.
  - 3. Prepare a local map or diagram showing areas affected by climate issues.





- 4. Ensure students have basic knowledge of climate change.
- 5. Divide the class into stakeholder teams ahead of the activity.

# 3. Role Play Scenario:

#### Title: "Save Our Green Town!"

A recent climate report shows that your town is facing serious environmental challenges due to climate change. The town council has called a public consultation to develop a Local Climate Action Plan. All stakeholders must present their views and propose solutions.

# • Examples of Local Problems:

- a. Increased flooding after heavy rains damaging streets and homes.
- b. Rising waste and illegal dumping in green areas.
- c. Fewer trees due to overdevelopment and poor planning.
- d. Poor air quality from traffic and open burning.
- e. Droughts affecting local farming.





# 4. Climate Heroes – Role Play Participants:

Role	Description	Example Talking Points
Local Mayor	Leads the town, wants practical and affordable solutions.	"We need to find a balance between protecting the environment and staying within our budget. I'm listening to all your concerns so we can decide on a sustainable action plan."
Youth Representa tive / Student	Speaks for young people, concerned about future generations.	"Our future is at risk. I want to see more trees, safer air, and cleaner spaces. We should have a say in what kind of world we grow up in!"
Environme ntal NGO Member	Advocates for sustainable and green solutions.	"We propose planting 1,000 new trees and creating awareness campaigns in schools. Nature-based solutions are affordable and long-lasting."
Local Business Owner	Worried about how regulations might affect profits.	"I support change, but we need time and support to adapt. New recycling rules or emissions taxes could hurt small businesses like mine."
Farmer	Struggling with crop issues due to changing weather.	"My crops are drying up. We need better irrigation support and help switching to more drought-resistant plants."
Scientist/Cli mate Expert	Shares data and realistic strategies.	"The data is clear: our rainfall patterns have shifted. Solutions like green infrastructure and sustainable urban planning can reduce risks."
Concerned Citizen	Passionate about trees, parks, and clean air.	"My children can't play outside like they used to. We must protect our parks and reduce car traffic in residential areas."
Media Reporter	Summarises all perspectives and leads the final Q&A.	"Today we've heard from citizens, businesses, and science. What common ground can we find? Let's take questions from the audience."





# 5. Role Play Activity Steps:

# **Session 1 – Preparation (60 minutes)**

- 1. Introduce the scenario and learning objectives.
- 2. Assign roles and distribute character cards.
- Stakeholder teams research their position and develop their arguments (using provided links).
- 4. Write key points on flipcharts.

# Session 2 - Role Play & Debrief (60 minutes)

- 1. Role play town hall meeting: each stakeholder presents.
- 2. Open debate and moderated discussion.
- 3. Class votes on a combined action plan.
- 4. Reflect on the process (What did we learn? What can we do locally?)

#### 6. Resources & Links:

- WWF Climate Change Resources for Schools
- NASA Climate Kids





- Young People and Climate Action European Commission
- Local council environmental website or recycling guides (adapt to your region)

# 7. Suggestions for Extension Activities:

- Write letters to local officials with proposed actions.
- Organise a school-wide climate awareness campaign.
- Create posters or digital presentations for a "Climate Fair".
- Invite a local environmental activist for a follow-up discussion.

**Reflection Questions:** - What surprised you during the role play? - Which solutions do you think are realistic in your town? - How can young people take action in real life?

#### **Conclusion for STEAM Teachers**

This role play unit provides a powerful opportunity for interdisciplinary STEAM education. It blends scientific understanding of climate change (Science), community problem-solving (Technology and Engineering), data interpretation (Mathematics), and creative communication (Arts).

By engaging in this structured dialogue, students practice critical thinking, empathy, and solution-building. They take ownership of real-world challenges and learn how their voices can shape change. This unit aligns with key 21st-century skills and supports inquiry-based learning, systems thinking, and student agency.





We encourage STEAM educators to adapt the scenario to their local context, connect it with curriculum standards, and explore project-based extensions. Climate change is a complex problem, and this activity empowers students to see themselves as part of the solution — informed, active, and resilient citizens of tomorrow.





# Role Play Unit WP2 Eco citizens, eco friendly!

Wi-Mi (Open: Wide Minds will Find Eco Virtual

**STEAM Solutions towards Climate change!)** 

Projekt broj: 2022-1-RO01-KA220-SCH-000084942



# Role Play Unit WP2 Eco citizens, eco friendly!

#### Guidance for the teacher in preparation for the Role Play

Climate change is a long-term change in the average weather patterns that have come to define Earth's local, regional and global climates. These changes have a broad range of observed effects that are synonymous with the term. Changes observed in Earth's climate since the mid-20th century are driven by human activities, particularly fossil fuel burning, which increases heat-trapping greenhouse gas levels in Earth's atmosphere, raising Earth's average surface temperature. Natural processes, which have been overwhelmed by human activities, can also contribute to climate change.

The consequences of climate change are extremely serious, and affect many aspects of our lives. Both countering climate change and adapting to a warming world are top priorities for all. We need climate action now. The best way to tackle the problem is to work with students from an early age because they will be the ones handling the problem in the future.

#### Eco citizens, eco friendly! Role Play

In Eco citizens, eco friendly! Role Play students will explore how human actions can have both a positive and negative impact on the natural environment. The idea of the role play is for the students to become agents of change in their schools and local communities. During the first stage students will brainstorm a list of environmental problems caused by human actions (waste recycling and disposal, forestation and deforestation, flood control and erosion, clean air enhancements, pollution, etc). Students will be divided into smaller groups (4-5 students) and each group will select one environmental issue related to school or city environment that they wish to study more. Students will gather a range of information about their chosen issue using the technology.

During the next stage of the unit students will take an active role in becoming 'eco-friendly' citizens as they work together to identify and then rectify a local environmental problem. Students may decide to clean up the local beach, assemble a recycling station at school, plant more trees at the local park, or lobby the local council to install more rubbish bins in the town centre, etc.



Students will then celebrate their achievements and promote an 'eco-friendly' message by sharing their learning and actions with other students in the school, parents and the wider community.

#### **Learning Outcomes**

Students will be able to:

- Describe a range of environmental issues that we face in today's world
- Identify actions that people can take to rectify/improve the natural world
- Participate in an environmental project within the school or local community taking responsibility for an allocated role
- Evaluate the success of the environmental project.

#### Eco citizens, eco friendly! Role Play main questions

- 1. What are the major problems that we are facing regarding climate change on the local level?
- 2. How can we make our school / local communities more eco friendly?
- 3. What can I do as a student to help prevent it?

#### Planning and execution of the Role Play Unit

Teachers are encouraged to see the prior knowledge of their students before implementing the unit so that they can provide personalised and meaningful learning opportunities. Teachers will need to adapt this unit to meet the needs of their students, school and community. The future focus issues of sustainability can be explored during this unit. The quality of our environment is important to our feeling of well-being. The more we can improve and respect our environment, the more benefits we create for all living things. Sustainability requires people to be responsible citizens and that is what we need to teach our students.

#### 1. Introduction

To introduce the climate change topic to the students, teachers can use one of the lesson plans created for the WP1, watch a movie about climate change or find a newspaper article about the topic. The material will be discussed with the students to see the extent of their knowledge about the topic. Teachers can also take students for a walk in the school yard or in the city park and discuss the material giving them an opportunity to observe the surroundings they live in.



#### 2. Research the topic

Students are divided into smaller groups (4-5 students). They choose a topic related to climate change that they would like to work on and that can make school or local community more eco friendly.

Students gather information about their selected environmental issue using a range of resources. Students should explore the following questions in their research:

- Why is the problem occurring?
- What is being done to remedy it?
- · What further action is needed?

They work on a topic using a chart with 3 steps:

- What I know about the topic;
- What I have learned researching the topic online;
- What actions I want to do (concrete actions).

Students share their presentations with the class.

#### 3. Planning and Taking Action

Students brainstorm a list of environmental problems that are occurring in their own school or local community with the intention of choosing one problem to improve or rectify. Problems might include: a polluted river, a muddy park, litter at the beach or in the town centre, damaged community gardens, etc. Students then identify ways that each environmental problem could be solved or improved.

Students make a plan chart that includes: the time it would take to solve/improve the problem; the cost of required resources; necessary manpower; the need for expert assistance, the number of people who would benefit from the improved situation, etc.

The teacher and students list all the different jobs that will need to be allocated so that the environmental project can be carried out. Jobs could include requesting parent help, seeking funding, asking for assistance from environmental groups, purchasing resources, taking photographs, gaining expert advice, etc.

#### 4. Sharing and Evaluating

Students make a digital slideshow (using photographs) to show their project in action and to promote an 'eco-friendly' message. This slideshow can be shown to other students in the school, parents and the wider community. Students may also wish to write a newspaper article about their work and publish it on the school website.



#### 5. Reflection on the work done and Impact

After the student projects are done teachers should do a reflection talk on the work done by the students to determine the impact. They can use questions:

- In what ways have people enhanced our environment?
- In what ways have people harmed the environment?
- What are people doing to try to help the environment?
- How has science and technology helped to improve our environment?
- What action still needs to take place to improve our natural world?
- What are the crucial steps you need to take to carry out environmental action?
- How well did we carry out our responsibilities when working together to improve/rectify an environmental problem?
- What do we need to continue to do to ensure the ongoing success of our environmental work?
- How do we feel about our actions?
- Would we do anything differently next time?
- Do we have any further ideas for environmental improvement in our community?

#### **Materials and Links**

https://climate.nasa.gov/what-is-climate-change/

This Role Play Unit is adapted and based on:

https://nzcurriculum.tki.org.nz/content/download/157510/1166843/file/Science%20Level%202%20Eco-warriors!.pdf







# Wi-Mi

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WP1: Role Play Unit

**Climate Heroes: Saving Our Planet** 





# **Role Play Unit**

# **Climate Heroes: Saving Our Planet**

#### Guidance for the teacher in preparation for the Role Play

The climate change is one of the most complex and threatening problems humanity face. Climate experts on the UN Climate Panel, IPCC, are in agreement that the concentration of greenhouse gases in the atmosphere is gradually increasing – which, in turn, leads to higher temperatures. With the rising temperatures, we are facing more extreme conditions such as drought, heat waves, flooding and hurricanes more frequently around the different parts of the globe. And the primary reason behind it is human activities that harm the balance.

Researchers tell us that the consequences of climate change can be very serious and have an impact on many different areas such as international security, food security, water supply and people's health. Not only poor countries, but also rich countries will be heavily affected by the climate change. Yet, having fewer resources will mean being more seriously affected.

Global warming is a cross border and cross sectoral problem, hence countries as well as representatives of different sectors should work together to tackle this vital problem. All the stakeholders can bring different solutions to the table due to being affected by the climate change in distinctive ways. From country aspect, The relationship between the world's rich and developing countries is a key factor in international climate negotiations. Many developing countries have very little trust in the rich world, which has not fulfilled commitments on amounts of aid and reduced carbon dioxide emissions. An important principle in the Climate Convention is that industrial countries should take the lead in the fight against climate change and its damaging effects. This is because rich countries have historically been the source of the greatest amount of emissions.

#### **Climate Heroes Role Play**

Climate heroes role play is a simulation of cross-sectoral climate negotiations or talks. The students will work in groups representing different stakeholders. During the entire city level "climate change panel", students will keep acting as if they are the real representatives of the sectors. Representatives will debate certain questions which are decided upon and prepared in advance. The task of the students is to try and make as great an impact as possible to promote the standpoints of their organizations/sectors.





The representatives will show different aspects of their lives and how they are affected by the climate change. The goal is for the students to understand how different sectors are affected and to learn to look at climate change from different aspects.

The climate role play is about questions relating to the environment as well as economics, social development, agriculture, education and justice. The idea is that the students, through the role play, will experience the conflicts and difficulties that arise when stakeholders and other participants with different contexts, needs, ideologies and interests have to cooperate with one another.

The purpose of the climate role play is that, by participating in realistic climate negotiations, students will increase their knowledge and will get involved in, as well as build belief in, the possibility of solving one of the greatest challenges of our time.

#### **Learning Outcomes**

The climate issue contains many different branches of study and the teaching should therefore be characterized by an interdisciplinary perspective. In this model, the students are active and use different tools for change since the game works by putting students in the position of going through process of finding solutions on local level which is similar to what is being done municipalities. Experience shows that students quickly gain insight into the complexity behind finding a solution to climate change problem considering the benefits of different sectors and importantly, how stimulating it can be to debate on local/regional level. From an educational perspective is that students, through their roles as representatives of different sectors, practise seeing problems from another perspective. Also, students can feel more secure in debates when they do not have to defend their own values and positions. A role play gives them the chance to loosen up and explore in detail their role's argumentation. At the same time, students gain greater understanding of different positions and the complexity inherent in real political negotiations.

### Climate Heroes role play's main questions

#### 1. Emission reductions (mitigation)

How the emission of greenhouse gases will be reduced is discussed on city levels. This is a matter of reaching agreement on a local, long-term goal and of the actual construction and division of how the commitment should be divided between sectors. What can be done on a city level about financing, green public transformation, energy





efficient buildings, behavioural change, water scarcity, encouraging cycling, producing food locally, recycling and waste management and flexible mechanisms, are all considered.

2. Adapting to climate change (adaptation)

The question of adapting to climate change is of central importance for cities. In addition to the requirements on reduced emissions on city level, cities require extensive technological and financial support for sustainable development and their own adaptation to a warmer climate.

#### Climate heroes role play participants

Assign each student a specific role to play within the fictional town or community, such as:

- Mayor
- Local government representatives
- Environmental Scientist
- Renewable Energy Engineer
- Farmer (or Farmers Association)
- Teacher
- Environmental NGO Representative
- Business Owner
- Urban Planner
- Activist
- Youth climate ambassador

#### **Climate negotiations**

During climate negotiations, questions that have been decided on and prepared in advance are debated with the goal find a solution to climate change on a city level and to reach a consensus on climate agreement. An important part of the negotiations is lobbying, when stakeholders try to get support and create alliances to advance their positions. During the negotiations, stakeholders can be exposed to special challenges through a crisis scenario, for example a water scarcity. The stakeholders' task is then to react to the crisis and possibly change certain positions and proposals. The purpose of an interruption in the negotiations can be:

• To let students use their knowledge of their role under new circumstances





- To fuel the debate
- Integrate new questions
- Widen and change perspectives

#### Planning and execution

Conducting the climate heroes role play requires organizational and pedagogical planning by the teacher and advance knowledge on the part of the students. The extent and content of the preparatory instruction is determined by many factors including the subjects and goals that are to be covered, the questions that are to be debated in the negotiations, and the amount of time put aside for the game. Subject preparation and the stakeholders' preparations are important for a thoughtful negotiation strategy, dynamic role playing and a lively debate.

It is also important that all stakeholders are aware of the debating rules, the agenda for the meeting and the role of the chairperson.

It is advantageous for the role play to include many different subjects for example Social Studies, Geography, Natural Science, Global Environmental Health, Environmental Politics and Global Studies. The Climate Heroes Role Play can also be conducted within the framework of a single subject.

Teachers should prepare in advance for:

- Theoretical subject knowledge that climate negotiations require
- Time for preparation and the carrying out of the negotiations
- Logistics in respects of rooms and schedule planning
- Distribution of roles (stakeholders, organizations and chairperson)
- What main questions and sub-questions are going to be debated (emission reductions and/or adaptation)
- The stakeholders' preparations
- Rules for the debate, agenda for the climate negotiations and follow-up discussion
- Suggestions for what a green/sustainable city can look like
- Chairperson and vice chairperson
- Evaluation: Will the preparatory work be evaluated or just the climate negotiations? Will the role play be followed up with oral seminars or written assignments?





• Material and helpful links

#### **Preparation for stakeholders**

This step is pivotal for stakeholders and organizations to have an impact during the negotiations and reach a desirable outcome. Preparation gives students a chance to present well-articulated ideas to defend their stand.

All stakeholders should have the basic knowledge of:

- 1) Climate change and global warming
- 2) City level policies and climate solutions
- 3) Common sustainable solutions

#### Stakeholders' preparations before the climate negotiations

Each stakeholder will have access to a role card that outlines the participant's positions and suggestions on the climate issue. Below are suggestions for ways in which the stakeholder can develop and deepen their role characters.

#### **Basic knowledge**

Since the task is to represent an organization/association and individual, stakeholders need to have knowledge of the benefit of these groups or individuals from combating the climate change from several aspects. It is necessary to map out how climate change affect them from political, geographic, economic and social aspects which are central for an understanding of the participants' positions and proposals as well as their relationship to other participants. They can also inform themselves about city level projects and policies related to climate change or how current policies have negative impact on climate change.

#### Analyze and develop the participants' role cards

The stakeholders role cards work similarly to a position paper that outlines for the participants the positions they should take on the climate issue, suggestions for courses of action and for cooperation and alliances.





Let the students go through the role cards together to:

- Note down and find out the meaning of difficult words, concepts and phenomena.
- Develop and get more into the role's positions and suggestions for courses of action.
- Possibly add additional positions and suggestions for courses of action.

#### Rules of debate and agenda for climate negotiations

The stakeholders now have some knowledge of the questions that are going to be dealt with during the climate negotiations. They have also read up on others' positions and proposals. The climate negotiations begin with registration and then continue with the opening speeches. After this, lobbying takes place followed by the main negotiations.

#### Step 1: Registration

The role play starts with registration. The stakeholders are given name tags, information on placing and the agenda.

#### Step 2: Opening speeches

The chairperson opens the meeting and asks each representative to hold its opening speech. The delegates have the opportunity to comment on speeches and/or pose questions in order to get answers.

#### Step 3: Lobbying

The representative look for support for positions and proposals and create alliances. The representatives try to promote their agendas. At the same time they must be prepared to make compromises and concessions.

#### Step 4: Main negotiations

The representatives discuss the question of emission reductions and/or adaptation. The chairperson and vice chairperson have the task of leading and moving the negotiations forward.

The goal is for the delegations to work out a consensus decision on a new climate agreement. If the representative do not succeed in reaching an agreement, then the final goal of the role play can be for the representatives to have presented their opinions, explanations and arguments for and against the various suggestions.





#### Step 5: Follow up

As a follow-up, the outcome of the Climate Heroes Role Play can be discussed.

- a) If the group succeeded in reaching a common climate agreement the discussion can focus on the agreement's strengths and what prevented the delegations from reaching a stronger and more complete agreement.
- b) If the group did not succeed in reaching an agreement, the discussion can focus on what prevented the delegations from doing so.

Discuss the following questions:

- What was it about your role that limited your efforts to reach an agreement? Was it a question of political, economic, scientific or other issues? Were there any conditions that stood in the way that were possible to change and if so, how?
- What participants were the least flexible and inclined to compromise? What participants were the most flexible?
- What participants made the most constructive proposals? Who made the least constructive proposals?
- c) How well does the role play correspond to real-life climate negotiations?

#### Chairperson and vice chairperson

In order for the debate to function properly it is important that the chairperson and vice chairperson are prepared. Students or teachers can act as chairpersons.

#### **Preparations**

The chairperson should prepare himself/herself by going through:

- The role cards to get a better understanding of the participants' positions and proposals.
- The main and secondary issues of the climate negotiations in order to gain a better understanding of them.
- Decide which main questions and sub-questions are going to be debated and present an agenda for the climate meeting.

#### Task during the climate meeting

The chairperson and vice chairperson should lead the discussion and help to move it forward. They are responsible for steering all the parts of the climate meeting: registration, opening speeches, lobbying and main negotiations.





#### Step 1: Registration

The chairpersons are responsible for the representatives' name tags, the placing of the delegations and the presentation of the agenda.

#### Step 2: Opening speeches

The chairperson's task is to let every representative hold an opening speech. The chairperson should make sure that the representative do not exceed the time allotted to them. If they do, the chairperson should use the gavel and tell the representative to finish his/her speech. If the representative does not do so, the chairperson can interrupt him/her despite the fact that the speech is not finished.

#### Step 3: Lobbying

The chairperson's task is to facilitate the representatives' work and be available to answer their questions. To facilitate lobbying the chairperson should have insight into the different delegations' positions and proposals and encourage alliances and cooperation.

#### Step 4: Main negotiations

The chairperson's task is to lead the negotiations and to move them forward. The chairperson should divide the speaking time in a fair way and make sure that as many representative as possible are allowed to speak. The chairperson can use various methods for moving the debate forward:

- Breaking down the main questions into sub-questions
- Repeating and clarifying positions and proposals raised by delegates
- Freezing negotiations (breaking off the negotiations and temporarily suspending the role play) to work out difficulties
- Summarizing negotiations and calling attention to proposals that could become a part of a new climate agreement
- Stimulating negotiations through issuing policy statements and press releases

#### **Materials and Links**

1) Climate Change Information and Resources:





IPCC Reports: The Intergovernmental Panel on Climate Change (IPCC) provides comprehensive assessments of climate science, impacts, and adaptation/mitigation options. You can access their reports and summaries on their website: IPCC

NASA Climate Change: NASA offers a wealth of resources on climate change, including interactive visualizations, educational materials, and scientific research: <u>NASA Climate Change</u>

NOAA Climate.gov: The National Oceanic and Atmospheric Administration (NOAA) provides climate data, maps, tools, and educational resources for teachers and students: NOAA Climate.gov

2) Role-Play Preparation Materials:

Role Cards Template: Create role cards for each stakeholder using a template like this one from TeachEngineering: Role-Play Card Template

Climate Change Lesson Plans: Explore lesson plans and teaching resources on climate change for various grade levels from the Climate Literacy and Energy Awareness Network (CLEAN): CLEAN

3) Interactive Tools and Simulations:

Climate Interactive: Climate Interactive offers interactive simulations that allow students to explore the impacts of different climate policies and scenarios: Climate Interactive

Climate Change Explorer: The Climate Change Explorer from National Geographic allows users to explore the impacts of climate change on various regions around the world: Climate Change Explorer

4) Debating Rules and Guidelines:

Model United Nations (MUN) Resources: Model UN provides guidelines and resources for conducting simulations and debates on global issues, including climate change:

Model United Nations

5) Educational Videos and Media:





TED-Ed Climate Change Playlist: TED-Ed offers a curated playlist of educational videos on climate change topics suitable for classroom use: <u>TED-Ed Climate Change Playlist</u>

National Geographic Climate Change Videos: National Geographic provides a collection of videos exploring various aspects of climate change and its impacts: National Geographic Climate Change Videos







# Wi-Mi

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**WP1: Role Play Unit** 

Earth Guardians - Protecting Our Planet





# **Earth Guardians - Protecting Our Planet**

**Roleplay Unit: Earth Guardians - Protecting Our Planet** 

**Grade Level:** Primary School (Ages 8–11)

**Duration:** 5 Sessions (1 hour each)

**Unit Goal:** Students will explore environmental issues and practice teamwork, problem-solving, and creativity by roleplaying as **Earth Guardians**, special protectors working together to save Earth.

#### **Roleplay Unit Overview**

This roleplay unit introduces young students to the basics of climate awareness through storytelling and interactive activities. Students will take on roles as "Earth Guardians" and collaborate to tackle environmental challenges.

#### **Learning Objectives**

By the end of the unit, students will:

- 1. Identify key environmental problems, like pollution, deforestation, and waste.
- 2. Understand simple actions they can take to help the environment.
- 3. Practice collaboration, problem-solving, and creativity.

#### **Roles for Students**

- 1. Forest Keepers: Protecting and restoring trees and animals in forests.
- 2. **River Protectors**: Safeguarding clean water and marine life.
- 3. **Eco-Inventors**: Creating new tools and ideas to help the planet.
- 4. Awareness Builders: Teaching others and spreading the message of Earth care.





#### **Session Breakdown**

#### Session 1: Meet the Earth Guardians!

#### • Warm-Up Activity (10 min):

"What's Wrong with This Picture?" Show contrasting images (e.g., polluted
 vs. clean rivers). Discuss what's happening in each.

#### Mini-Story (15 min):

- o Introduce the story of the **Earth Guardians**:
  - "Earth is in trouble! Litter, pollution, and waste are hurting our planet, but Earth Guardians are here to help!"

#### Role Assignment (20 min):

 Divide students into the four groups. Each group designs their Earth Guardian symbol or badge.

#### • Wrap-Up (15 min):

- o Discuss: What do Earth Guardians do to help the planet?
- o Homework: Draw your Earth Guardian in action.

#### **Session 2: Understanding the Problem**

#### Warm-Up Game (10 min):

 "Earth Says" (like Simon Says) with actions like "Clean the rivers!" or "Plant a tree!"

#### Interactive Lesson (20 min):

Learn about one environmental issue, such as pollution or deforestation.
 Use simple visuals, videos, or storytelling.

#### • Team Brainstorm (20 min):

- o Groups discuss how their Earth Guardian role can help solve the problem.
- o Each group shares one idea.





#### Reflection (10 min):

What's one thing we can all do to protect the planet?

#### **Session 3: The Earth Guardian Mission Begins!**

#### Scenario Introduction (15 min):

"Earth needs our help! Forests are disappearing, rivers are dirty, and waste
 is piling up. Earth Guardians must act now!"

#### Roleplay Activity (30 min):

- Each group works on their mission:
  - Forest Keepers: Build a mini-forest with craft materials and discuss ways to protect trees.
  - River Protectors: Create a model of a clean river using blue paper and materials for fish, plants, and water.
  - Eco-Inventors: Design a gadget or solution to reduce waste or pollution.
  - Awareness Builders: Write a short poem, song, or slogan to encourage people to care for Earth.

#### Wrap-Up (15 min):

Groups present their work to the class.

#### **Session 4: Earth Guardians Unite!**

#### Scenario Update (15 min):

"Earth still needs more help! The problems are growing, and the Earth
 Guardians must work together to create a big plan to save our planet!"

#### Team Collaboration (30 min):

- All groups come together to create an "Earth Guardian Pledge," listing five actions everyone can do to help Earth.
- Create a large class poster with the pledge and illustrations.





#### Creative Activity (15 min):

Make Earth Guardian capes or masks with craft supplies.

#### Session 5: Earth Guardians in Action

#### • Warm-Up Activity (10 min):

 Review the Earth Guardian Pledge and act out solutions (e.g., pretend to recycle, plant trees, or clean a river).

#### • Real-Life Action Plan (20 min):

- Discuss: What can we do at school or home to help?
- Each group writes one simple action they can commit to, like turning off lights,
   recycling, or using less water.

#### Celebration (20 min):

- Hold an Earth Guardian Graduation Ceremony where students receive certificates for their role.
- Share the Awareness Builders' poem or song and recite the Earth Guardian
   Pledge together.

#### Final Reflection (10 min):

- o What did you enjoy most about being an Earth Guardian?
- How will you help protect the planet every day?

#### Assessment

- 1. Participation in roleplay and teamwork.
- 2. Creativity in designing solutions and presentations.
- 3. Contributions to the Earth Guardian Pledge and class poster

#### **Materials Needed**

- Colored paper, markers, glue, and scissors.
- Craft supplies (pipe cleaners, popsicle sticks, recycled materials).





- Certificates for the graduation ceremony.
- Images or videos for discussion.

#### **Extension Ideas**

- **Community Action**: Organize a small cleanup activity in the school yard or a local park.
- **Parent Involvement**: Share the Earth Guardian Pledge with families and encourage participation.
- **School Project**: Start a recycling initiative or create a small garden.

This engaging and hands-on unit empowers primary students to understand environmental challenges while fostering teamwork and a sense of responsibility as **Earth Guardians**.







# Wi-Mi

"Open: Wide Minds will Find Eco Virtual STEAM Solutions towards

Climate change!"

2022-1-RO01-KA220-SCH-000084942

WP1: Role Play Unit
One for All, All for One!





# **Role Play Unit**

# One for All, All for One!

# 1. General Description:

In this dynamic and engaging role-play, students from diverse backgrounds are presented with a shared challenge, the pressing issue of climate change. The premise is to immerse participants in a narrative that transcends geographical boundaries and cultural differences, emphasizing the interconnected nature of our global climate crisis. By assigning distinct roles to each student, we aim to cultivate empathy and a holistic understanding of the multifaceted dimensions of environmental challenges. These roles may range from representing countries grappling with the immediate impacts of climate change to embodying the voices of marginalized communities disproportionately affected by environmental degradation. Through this immersive experience, participants will gain a nuanced perspective on the universality of climate-related issues and recognize the need for collaborative, international efforts in developing effective solutions. The role-play serves as a powerful tool to foster a sense of shared responsibility, encouraging students to transcend their individual perspectives and work collectively towards a sustainable and resilient future for our planet.

Throughout this role-play, students will delve into the intricacies of climate change, gaining a solid understanding of what it is and how it affects our world. By stepping into different roles representing various countries, they'll discover firsthand the unequal impacts of extreme weather on people and food systems globally. This immersive experience aims to foster empathy and shed light on the interconnectedness of our planet's climate challenges. As they navigate these roles, students will brainstorm practical solutions, exploring ways to prevent climate change from worsening. From small, individual actions to the importance of countries working together, the role-play empowers students to see themselves as active contributors to the global effort in combating climate change, promoting a sense of shared responsibility for our planet's well-being.

During the role play, or rather before, it will be very important to use a laptop with internet access or videos already loaded on the laptop that explain climate change in a





comprehensive and entertaining way. Thus, with the help of technology and visualization, students' interest in the subject will increase even more.

To perform this roleplay, it would be best to divide the entire process into several parts. It would be more beneficial for the understandability of the subject to implement a set of activities from general to specific, that is, at a level that will gradually increase students' participation in the activity.

In this regard, the following steps can be applied:

# 2. What is "climate change" basically?

Climate change is the process of warming of our planet. The most widely recognised and widely used name for it is "global warming". Scientists estimate that human activities have caused the Earth to warm by about 1 degree Celsius since the rise of industry and the use of toxic gases. While this may not seem like a lot, it means big things for people and wildlife around the world. Unfortunately, rising temperatures don't just mean better weather. In part, rising temperatures may sound like a nice phrase. But it's much more dangerous and important than the sand-sea-sun triangle. The changing climate will make our weather more extreme and unpredictable. As temperatures rise, some areas will become wetter and many animals may not be able to adapt to the changing climate. Therefore, you can guess that climate change may be the beginning of the factors in science-fiction films such as thirst/end of human life/decline in fertility/departure from natural life! etc.

In addition, a few entertaining and informative videos about climate change can be shown. The concept of these videos can be animation, documentaries without disturbing images, interviews with public figures, etc. For example:

Climate Change for Kids | A fun engaging introduction to climate change for kids: https://www.youtube.com/watch?v=WkvPdUtYhX8

Climate Change Song: <a href="https://www.youtube.com/watch?v=cn9PhiDJp-A">https://www.youtube.com/watch?v=cn9PhiDJp-A</a>

Leonardo DiCaprio (UN Messenger of Peace) at the opening of Climate Summit 2014: https://www.youtube.com/watch?v=vTyLSr VCcg

I am addressing future generations: "We are sorry":





#### https://www.youtube.com/watch?v=eRLJscAlk1M

# 3. Raise awareness of climate change with visuals

#### **Introduction to Big Weather Changes:**

Start by talking about big weather changes linked to how we treat the Earth. Explain simple terms like floods, not enough rain (drought), big fires in the forests, and giant waves (tsunami). Help them see how these changes are connected to what people do.

#### **Look at Pictures Together:**

Show pictures that tell stories about these big weather changes. Make sure the pictures show different places in the world. Ask the students to guess where these things might be happening based on what they see in the pictures.

#### **Talk About What's Happening:**

Discuss what's happening in each picture. Is it too much water (flooding), not enough rain (drought), or maybe a big fire in the trees? Help them connect the pictures to real-life events.

#### Think About Food and Farms:

Move on to how these big weather changes affect food and farms in each place. Ask questions like:

What happens to crops when there's too much water or not enough?

How does the fire in the forest affect the animals and the food we get from them?

#### What Happens After the Big Weather Changes?

Talk about what comes next after these big weather changes. How do people fix things and get back to normal? Discuss the changes they might need to make to deal with the new weather.

#### **Find More Examples Together:**

Challenge the students to think of more examples of big weather changes. They can also look online for more examples to learn about different situations. Stress the importance of understanding how our actions affect the Earth.





This straightforward guide helps teachers lead students through a conversation about climate change effects using simple language, promoting understanding and curiosity about the world around them.

# 4. Main activity: Role Cards!

#### Role Cards on the field!

Spread the cool Role Cards on the table for everyone to check out. Take some time for the gang to get to know the different folks on each card – names, ages, where they live, you know, all the cool stuff!

#### **Playing Detective:**

Tell the crew that you're about to share some wild effects of climate change. After each effect, the squad's mission is to figure out which Role Cards match the affected peeps. It's like being climate detectives!

#### Climate Chit-Chat:

Look at each Role Card one by one. Chat about what could go wrong for that person and what could happen next. It's like guessing the plot of a super cool story.

#### **Versus Challenges:**

The goal is to think about the life of each character. Keep an eye on which Role Cards get snatched up a lot and which ones stay chill. By the end, the gang will see who's dealing with the most climate craziness, showing how some people face bigger challenges.

#### Our Life is Part of It!

Wrap it up by linking this game to the squad's own lives. Talk about how we might feel the effects of climate change here too, even if they're not as obvious. It's like finding hidden clues in our everyday lifes!

In this way, as if it were a puzzle, the students will try to guess the people on the cards by putting themselves in the position of "climate detective" and try to do a self-brainstorming on this subject. This will increase the attractiveness and memorability of the topic!





# 5. Role card story examples

Climate Change Effect: Flood

Role Card: Say hello to Raj, a 12-year-old from India living in a riverside village.

Consequences: Due to heavy floods, Raj's village is submerged. His family's home and

farmland are underwater, making it tough for them to continue their daily lives.

Climate Change Effect: Wildfire

**Role Card:** Introducing Mia, an 11-year-old from Australia residing in a forested area. **Consequences:** Mia's home is at risk because of a raging wildfire. The fire threatens not

only her house but also endangers the unique wildlife around her.

**Climate Change Effect:** Rising Sea Levels

**Role Card:** Meet Javier, a 13-year-old from the Philippines living in a coastal town.

Consequences: Javier's town is facing rising sea levels. It's affecting their homes and

making it harder for his community to live near the beautiful ocean they love.

**Climate Change Effect:** Extreme Heatwaves

Role Card: Greetings to Nia, a 9-year-old from the United States in a city setting.

Consequences: Nia's city is experiencing extreme heatwaves. It's not just uncomfortable;

it's also causing challenges for the people and the environment around her.

Climate Change Effect: Melting Ice

Role Card: Here's Sven, an 8-year-old from Norway living in a snowy village.

Consequences: Sven's village is witnessing melting ice and snow. This affects their way of

life, from outdoor activities to the animals that call the icy landscape home.

Climate Change Effect: Unpredictable Storms

Role Card: Meet Aisha, a 14-year-old from Bangladesh living near a coastal area.

Consequences: Aisha's community faces unpredictable storms, causing damage to

homes and making it challenging for families like hers to rebuild and feel secure.

Climate Change Effect: Desertification

Role Card: Say hi to Omar, a 11-year-old from Mali living in a village near the Sahara

Desert.

Consequences: Omar's village is experiencing desertification, making it tough for his

family to grow crops and sustain their way of life in the changing landscape.

Climate Change Effect: Coral Bleaching

Role Card: Introducing Maya, a 10-year-old from Indonesia living on a beautiful island.

**Consequences:** Maya's island is dealing with coral bleaching, affecting the vibrant marine life she loves. It's a challenge for her community, which relies on the ocean for food and

livelihoods.

Climate Change Effect: Thawing Permafrost

**Role Card:** Greetings to Leo, a 12-year-old from Russia living in a permafrost region.

**Consequences:** Leo's hometown is experiencing thawing permafrost, causing shifts in the

landscape and creating challenges for their infrastructure and daily life.

Climate Change Effect: Prolonged Monsoons

Role Card: Here's Priya, a 9-year-old from Nepal living in a mountainous region.

Consequences: Priya's community faces prolonged monsoons, leading to landslides and

disruptions that impact their homes and access to resources.





#### 6. How can we find solutions for these?

#### **Problem Tree Exploration:**

- Assemble the students into one large group or smaller groups.
- Engage students in identifying various causes and effects contributing to climate change. Encourage brainstorming on factors like transport emissions, the high-intensity food industry, global warming, deforestation and more&more.
- Populate the Problem Tree with these insights, creating a visual representation of the interconnected issues driving climate change.

#### **Solution Tree Discussion:**

- Foster group collaboration for filling in the Solution Tree.
- Prompt students to brainstorm and discuss potential solutions to address the identified problems of climate change.
- Encourage creative thinking, suggesting solutions such as promoting walking and cycling, implementing changes in laws to reduce congestion and pollution, and fostering more awareness and education about climate change.
- Populate the Solution Tree with the proposed strategies, creating a comprehensive display of actionable measures to combat climate change.

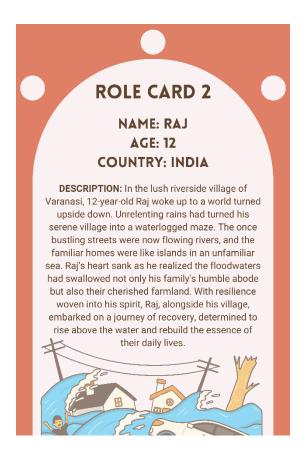
By completing both the trees, students will visually grasp the complex web of factors contributing to climate change and collaboratively explore innovative solutions. This interactive activity not only enhances environmental awareness but also empowers students to actively contribute to the ongoing conversation about climate change mitigation.





# 7. Role card design examples





https://www.canva.com/design/DAF-

16OXg6g/41mRNUeusF2df bPU7ROvg/edit?utm content=DAF-

160Xg6g&utm campaign=designshare&utm medium=link2&utm source=sharebutton

### 8. Main Question of the Activity:

How can we actively engage students from diverse backgrounds in understanding and addressing the multifaceted challenges of climate change through an immersive and collaborative role-play experience?

# 9. Objectives of the Activity:

To cultivate empathy and a holistic understanding of climate change among students by assigning distinct roles that represent various countries and communities.

To promote a nuanced perspective on the interconnected nature of global climate challenges and the need for international cooperation.





To empower students to brainstorm practical solutions, from individual actions to collaborative efforts, in mitigating and preventing climate change.

To enhance students' awareness of the universality of climate-related issues and the importance of shared responsibility for the planet's well-being.

# 10. Basic Knowledge About the Activity:

The role-play involves students embodying different personas, ranging from countries grappling with immediate climate impacts to voices of marginalized communities disproportionately affected by environmental degradation. The narrative explores the diverse consequences of climate change, fostering a deeper understanding of the global crisis. Students are encouraged to brainstorm solutions collaboratively, recognizing the interconnectedness of their roles and responsibilities.

# 11. Preparation, Planning and Execution:

Prior to the role-play, it is crucial to leverage technology by utilizing a laptop with internet access or pre-loaded videos explaining climate change comprehensively and entertainingly. This step aims to enhance students' interest and understanding of the subject matter. Additionally, the entire process should be divided into manageable parts, gradually increasing students' participation in the activity. The preparation includes defining climate change, showcasing engaging videos, and raising awareness about its impacts and solutions. The role-play activity is structured in a way that starts with an introduction to climate change, followed by visuals to raise awareness about big weather changes. Students then engage in discussions about the consequences of these changes, specifically focusing on food and farming. The subsequent steps involve thinking about life after these extreme weather events and finding more examples. The main activity involves distributing Role Cards, prompting students to play "climate detectives" and connect the scenarios to their own lives. The guide emphasizes simplicity, engagement, and memorability.

#### 12. Conclusion

In conclusion, the designed role-play and role cards represent a interesting educational tool, transcending geographic and cultural boundaries to address the pressing issue of climate





change. This comprehensive activity aims to instil a deeper understanding of the intricate challenges posed by global environmental shifts. Through assigning diverse roles, students gain a firsthand experience of the unequal impacts of climate change, fostering empathy and a broadened perspective on the interconnected nature of our planet's climate crisis.

The incorporation of technology, such as videos explaining climate change, enhances the educational experience by providing visual aids that capture students' interest and facilitate a more profound comprehension of the subject matter. This strategic approach acknowledges the significance of utilizing various teaching methods to engage students effectively and make the learning process more accessible and enjoyable.

The roleplay activity, divided into structured segments, enables a gradual increase in student participation, ensuring a seamless transition from general concepts to specific, immersive scenarios. This methodological approach facilitates a comprehensive understanding of climate change while promoting an enjoyable learning experience. The use of engaging visuals, entertaining videos, and interactive role cards collectively serves to make the educational process both memorable and impactful.

The role cards, featuring diverse characters facing distinct climate change effects, provide a personalized touch to the learning experience. Each role card represents a unique narrative, contributing to a richer understanding of the multifaceted dimensions of climate-related challenges. The incorporation of scenarios such as floods, wildfires, and rising sea levels allows students to connect emotionally with the characters, fostering a sense of urgency and shared responsibility in addressing climate change.

In essence, this educational activity endeavours to empower students to think critically, collaboratively, and proactively about climate change. By immersing students in the interconnected web of climate challenges and encouraging them to brainstorm solutions, the role-play and role cards contribute to a holistic and nuanced comprehension of environmental issues. The comprehensive nature of this educational approach equips students with the knowledge and empathy needed to actively engage in the global dialogue on climate change and work collectively towards a sustainable future for our planet.