

Introduction

Welcome to an exciting and educational journey into the world of climate change! Nowadays the role of teachers as advocates for a sustainable future in shaping young minds is more important than ever. The purpose of this digital learning material, especially designed for primary school pupils, but applicable to other age groups, is to provide teachers with the necessary tools and guidelines to teach about one of the today's current issues – climate change.

Living in the age of technology, it is essential to provide pupils with versatile understanding of the issues that our planet faces and to inspire them to become environmentally responsible citizens. Through interactive tasks, thought-provoking discussions, eco workshops, and science experiments, pupils will delve into the scientific explanation of climate change, its impact on our world and the possibilities for how we can achieve positive changes together.










The main purpose of these guidelines is to provide pupils with a structured scheme to effectively get acquainted with complex concepts related to climate change. The digital learning material is designed by adapting information to the age group of the pupils and ensuring that it is engaging and meaningful. Using a combination of visual information, story, interactive and practical activities one can captivate pupils' imagination and promote a genuine interest in environmental conservation.





The digital learning material covers 12 different topics that both teach pupils about what is happening in the world and nature, invite them to think about climate change, and encourage children to become change makers themselves:

1. What happened to dinosaurs?
2. How diverse is nature on our planet Earth?
3. How does climate change affect various natural phenomena: rain, wind, hail, storms, and tornados?
4. How do such natural phenomena as earthquakes, volcanoes, tsunamis and flood affect people and the surrounding nature?
5. Why is the climate changing and what is global warming?
6. How diverse is the water world, what pollutes it and how can we help water inhabitants?
7. What is the living environment like in hot and cold deserts and how are they affected by global warming?
8. Why is the forest a great value and what causes forest fires?
9. How do animals adapt to climate and its changes?
10. How can plants help reduce global warming?
11. What can we do to protect the environment and what is a green lifestyle?
12. What will our planet Earth be like in 100 years?

The digital tool is compatible with interactive boards, tablets and computers. To ensure the best operation we recommend opening the digital tool with Chrome or Edge browsers (or other Chrome based browsers).

User interface elements:

	<p>HOME BUTTON (Brings back to the starting page of the Digital learning tool)</p>		
	<p>ACTIVITY LIST BUTTON (Brings up all the activities/tasks available within the respective lesson)</p>		
	<p>RESOURCES BUTTON (Brings the user to the resources page where both Curriculums and Teacher Guidelines are to be found)</p>		
	<p>NOT AN ACTUAL BUTTON (This icon is used as an indication, typically for interactive tasks)</p>		
	<p>REPEAT BUTTON (Starts the activity all over again)</p>		
	<p>NEXT STEP/PAGE BUTTON (Brings the user to the next step or action within the respective lesson)</p>		
	<p>NEXT LESSON BUTTON (Brings the user straight to the next lesson)</p>		
	<p>INACTIVE BUTTONS</p>		<p>HIGHLIGHTED BUTTONS (Used as an indication of which buttons are to be pressed next in order to proceed with the Digital learning tool – typically after audio tasks/activities)</p>

	ICON REPRESENTING INTERACTIVE TASK/ACTIVITY
	ICON REPRESENTING DISCUSSION TASK/ACTIVITY
	ICON REPRESENTING AUDIO/VIDEO TASK/ACTIVITY
	ICON REPRESENTING ECO WORKSHOP OR EXPERIMENT TASK/ACTIVITY

The teacher support materials consist of a structured learning programme for 12 lessons and guidelines with suggestions on how to work with the activities of the digital learning tool, but teachers are invited to adapt and personalize it according to the learning needs and interests of the pupils. Each class is like a unique habitat that should be allowed to develop using pupils' ideas, previous experiences and creativity. In this way it is possible to create a co-operation and an inclusive learning environment that will give pupils the opportunity to become advocates of a sustainable future.

The guidelines are developed to support teachers in inspiring young minds, promoting a sense of responsibility and empowering pupils to make a positive impact on the surrounding world, thus creating a greener future.

The recommendations for teachers to consider when teaching primary school pupils about climate and climate change:

1. Explain that climate change is a long term change in weather and temperature on Earth. Help pupils understand that they are not only a natural process, but also (mostly) caused by actions of people, for example, burning of fossil fuels, as a result of which greenhouse gases are released into the atmosphere.
2. Introduce the concept of the greenhouse in a simplified way. Explain how greenhouse gases trap heat from the sun and contribute to global warming.
3. Discuss the effects of climate change on plants, animals and ecosystems. Help children understand how the increase in temperature, changes in precipitation regimen and disappearance of habitats affect biodiversity. Highlight specific examples, such as endangered species or disappearing habitats.
4. Explain how climate change can affect people's lives. Discuss the increased occurrence of more frequent extreme weather events, such as hurricanes or heat waves and their

impact on people's lives, homes. Help pupils understand the potential consequences regarding food production, access to clean water and health.

5. Discuss with children the actions that can help reduce climate change. Introduce them to such concepts as renewable energy, recycling and sustainable practice. Encourage children to think about their actions and how they can positively influence the current situation at school and in their family.
6. Share stories about scientists or young activists who have made a difference in the climate change field. Highlight positive initiatives, innovative solutions and the power of collective action.
7. Promote a sense of empathy for the planet and all its inhabitants. Help children understand their role as caretakers of the Earth and the importance of taking responsibility for its wellbeing. Encourage them to share their ideas, thoughts and actions to protect the environment.
8. Encourage pupils to ask questions, think critically and evaluate information about climate change. Teach them to distinguish facts from opinions and to consider different points of view.
9. Inspire children to believe that their actions can make positive changes. Invite them to tell about what they have learned in their family and to participate in environmental projects.
10. It is important to use age-appropriate language to involve children in the learning process. Make the discussions relevant to their daily lives and invite them to actively participate in finding solutions to climate change.

Pupils may have already heard about climate change, but the information may not always be true, therefore it is important for the teacher to dispel myths about this topic. Here are some of the more common myths and their explanations:

1. Myth: "Climate change is just a natural cycle." Explanations: Although Earth has experienced natural climate change in the past, the current change is happening at an unprecedented rate. Explain to pupils that human activities, such as burning fossil fuels and cutting down forests, are amplifying these changes.
2. Myth: "Climate change is not a big problem, it will not affect us." Explanation: Help pupils understand that climate change can significantly affect ecosystems, habitats, animals, plants and human life. Discuss examples such as sea level rise, extreme weather and habitat changes that affect plants and animals that pupils may be familiar with.
3. Myth: "One person cannot change anything." Explanation: Teach children about the power of collective action and the importance of individual choice. Explain that everyone's actions, no matter how small, contribute to greater efforts to battle climate change. Encourage them to make environmentally friendly choices, such as saving energy, recycling and reducing the amount of waste.
4. Myth: "It is too late to do anything about climate change." Explanation: Emphasize that, although the situation is serious, there is still hope and opportunities to attain positive change. Highlight examples of individuals, communities and countries taking action to reduce climate change and promote sustainability. Encourage children to think about innovative solutions and inspire them to be part of the solution.

5. Myth: "Climate change only affects polar bears and glaciers." Explanation: Broaden children's comprehension about the wider impacts of climate change. Discuss how they affect different ecosystems and habitats, including forests, oceans and coral reefs. Help children see the interconnection of these systems and their influence on biodiversity, food production and everyday life.

When addressing these myths, it is important to use age-appropriate language to make the concepts engaging and understandable. Encourage open discussion, ask pupils their ideas and give them an opportunity to take action in their own lives. Do not forget to promote a sense of optimism in your pupils and inspire them to become environmentally conscious people who can make a difference.