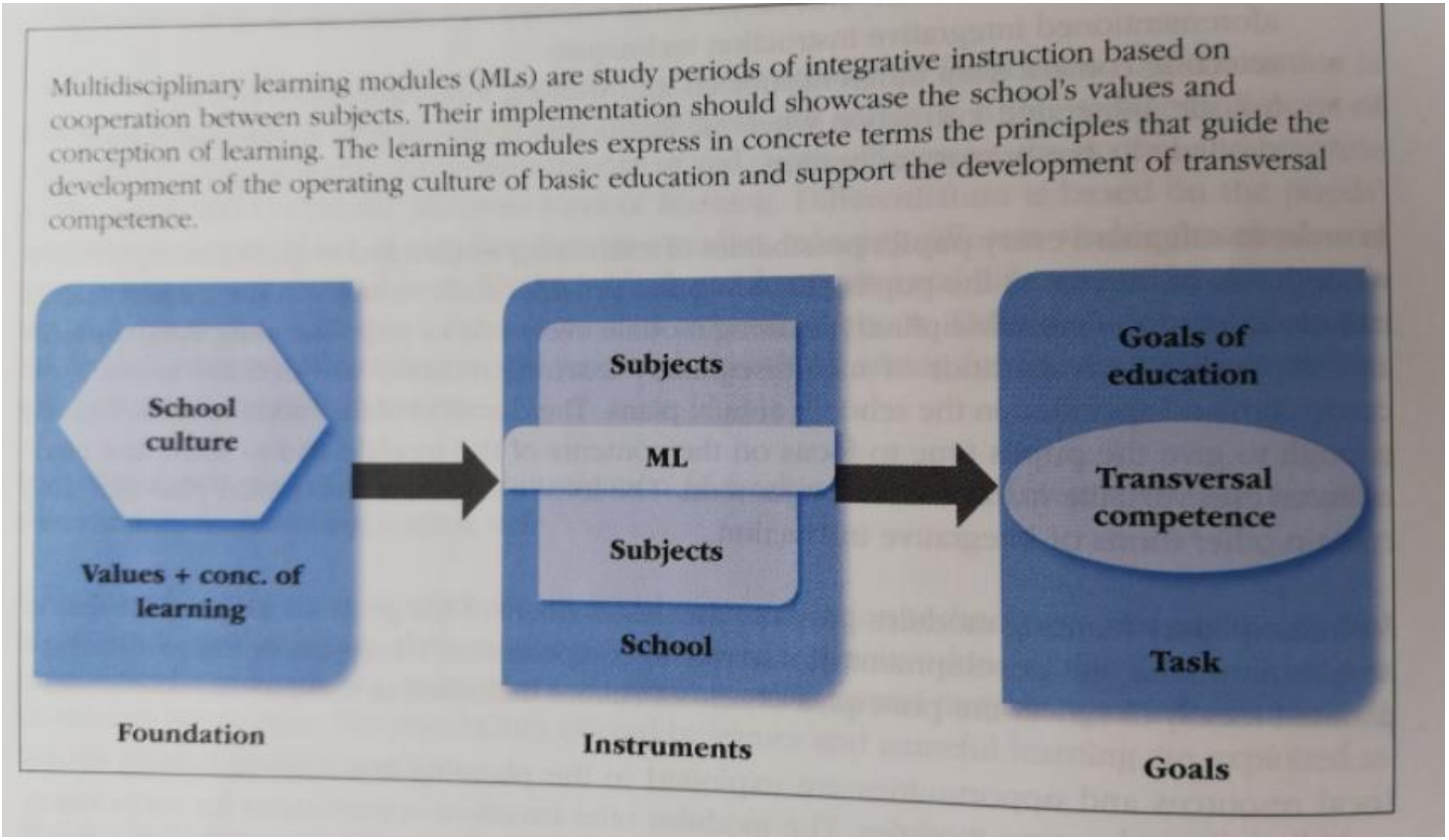
GEAR (Global and Environmental Awareness and Responsibility) – a Toolkit for Inclusive Environmental Education
Multidisciplinary Learning Module (MLM) on Climate Change with Grade Six
15th to 19th April 2021



Finnish National Core Curriculum 2016, p. 34

Prior to the MLM (or MOK) week, we watched the documentary ‘A Life on Our Planet’. Afterwards we discussed the documentary and issues that the pupils were interested in learning about during the MLM week. Areas of interest were:

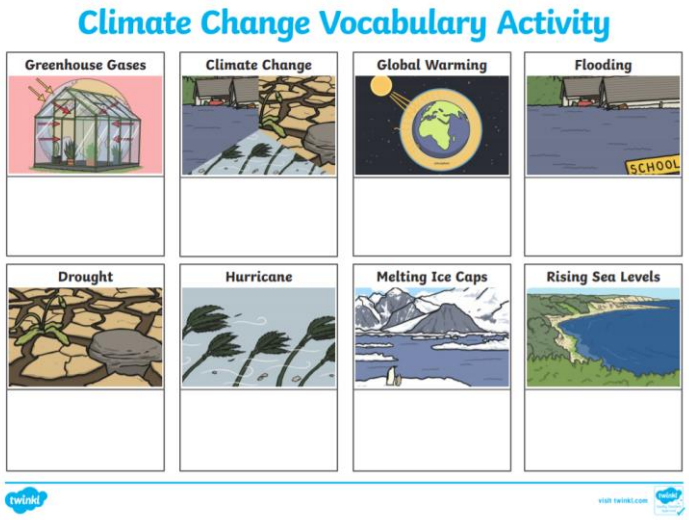
1. The impact of deforestation on animals and climate
2. The impact of climate change on the oceans and sea creatures
3. When did people start using fossil fuels?
4. What will happen if we don’t do something?

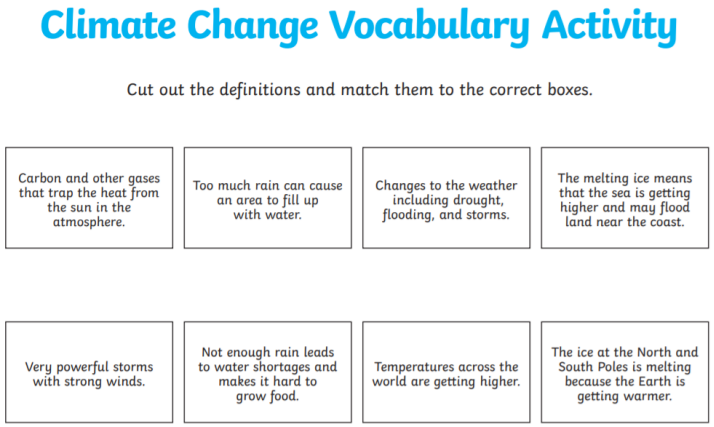
Monday 12th April 10.00 to 15.00

Revising Key Concepts and Vocabulary

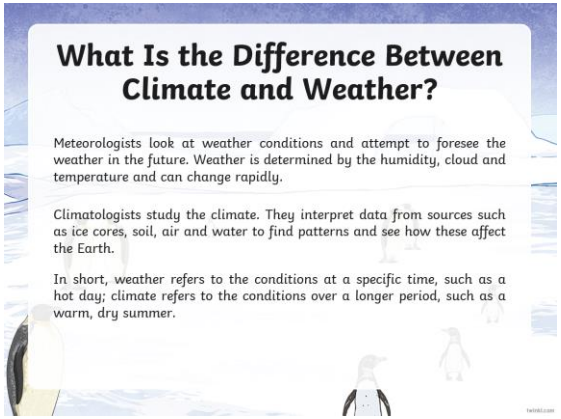
Warm up activity: Climate Change Vocabulary

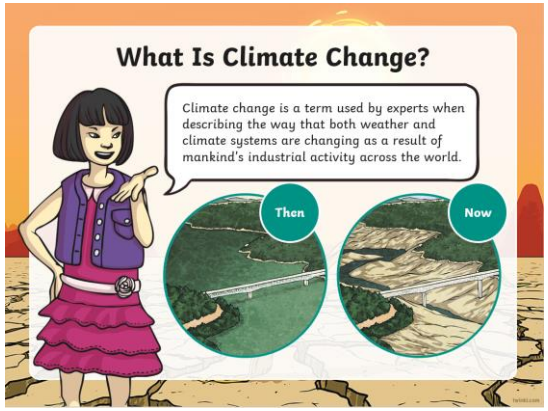
Match the definitions (English) Write the definitions and key concepts in Finnish.

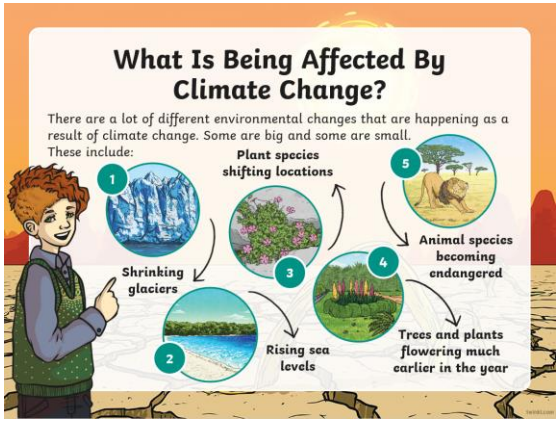




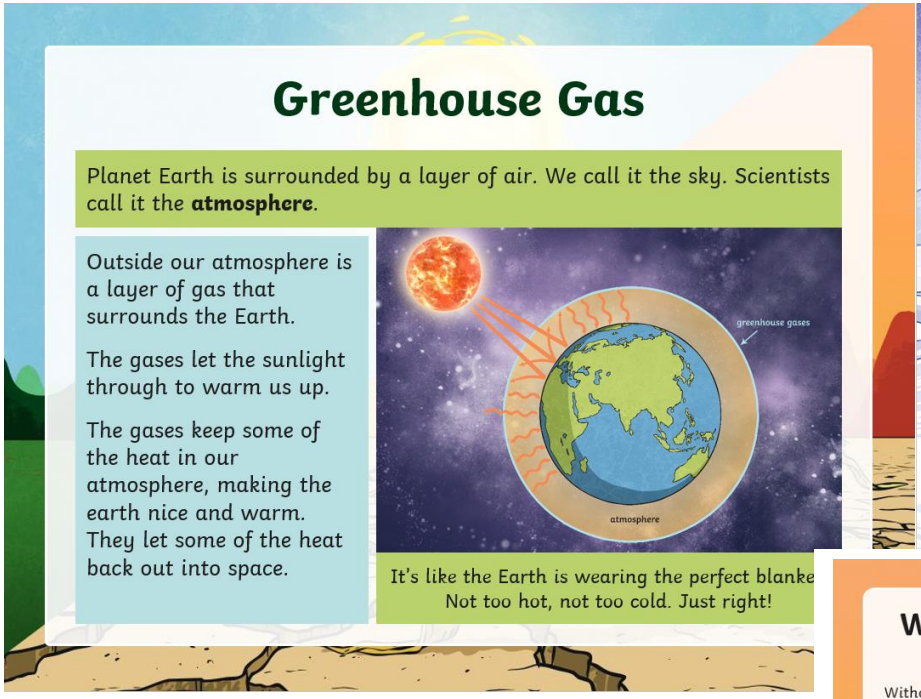
Session 1: (Ppt and activities)
What is the difference between climate and weather?
What does climate change mean?
Climate change impacts in Finnish: Helsingin Sanomat Lasten Uutiset

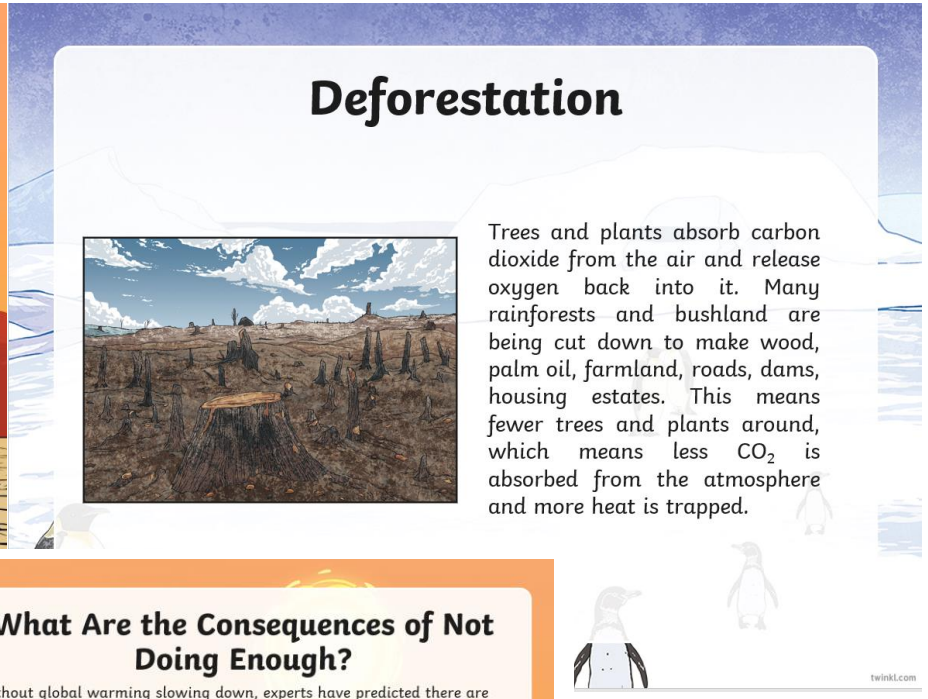






Session 2: (Ppt and activities)
What is the role of greenhouse gases in climate change?
What are the consequences of global warming?





Session 3: Experiment

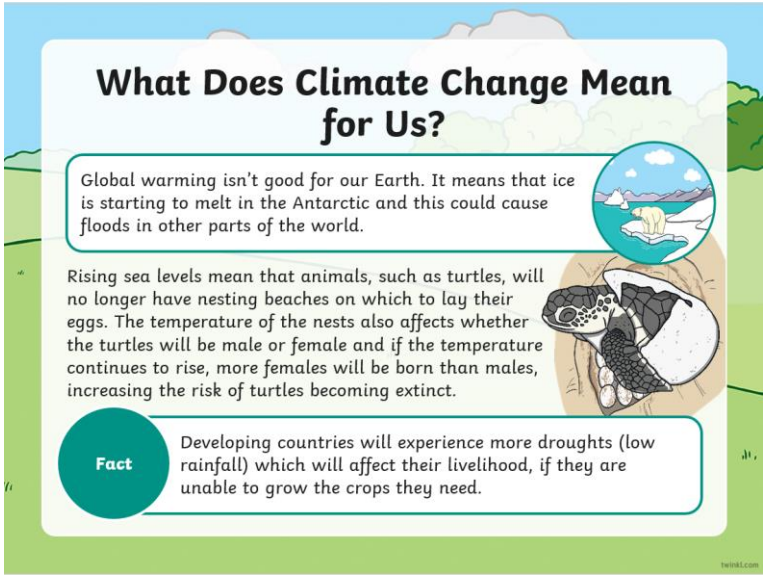
Climate Change Comparative Test

Tuesday 13th April 9.00 to 15.00

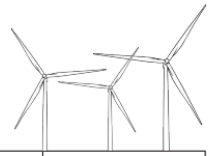
Research and Discussion

Session 1: Energy
What are the benefits and side effects of different energy sources?

Session 2: Earth, wildlife, humans
What is the impact of climate change on the Earth?
What is the impact of climate change on wildlife around the world?
What is the impact of climate change on humans around the world?



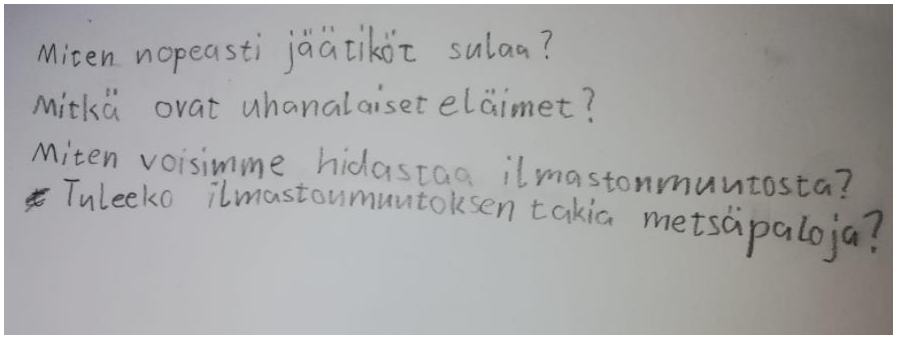
Energy Sources



Research the use of the different energy sources we use.

Energy Source	Benefits of its use	Side effects of its use	Is this energy source a good source or bad source?
Solar Energy			
Wind Energy			
Electric Power			
Biomass			
Nuclear Energy			
Fossil Energy (Coal, oil, natural gas)			

Collaboration with our buddy class 2B



How quickly are the ice caps melting?

Which animals are endangered?

How can we slow climate change down?

Is climate change causing the forest fires?

These are the questions that 2B wanted to ask us. We created a TEAMS link to tell them the answers. They also came to our classroom one morning before we came to school to look at our biome dioramas.

Our answers to the questions:

The ice is melting at about 10% every 10 years – this means that if it doesn't slow down, in 100 years, there will be no ice.
Endangered animals include tigers, pandas, gorillas, many insects, and in Finland, the Arctic Fox and the Saima seal.
We can try to live sustainably by recycling and looking for clean energy.
Yes, because the climate is very dry and there is more danger of fires.

Session 3: Biomes – identifying problems and devising solutions
What is the impact of climate change on specific biomes around the world? Create a diorama of your biome.

https://wwf.panda.org/projects/our_planet_netflix_wwf_nature_documentary/education/

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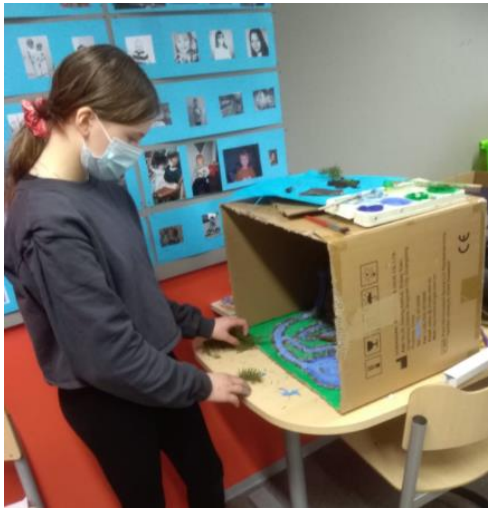

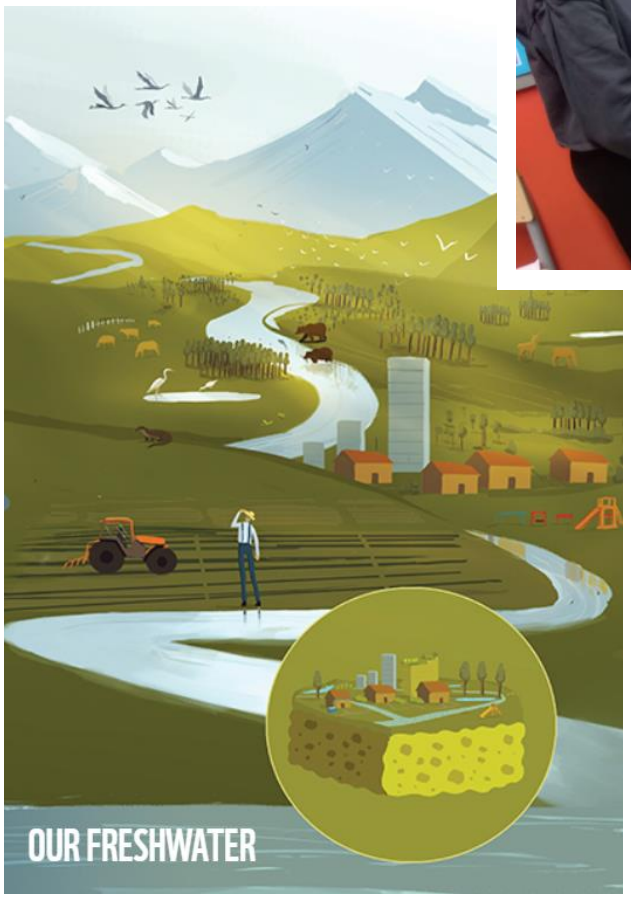

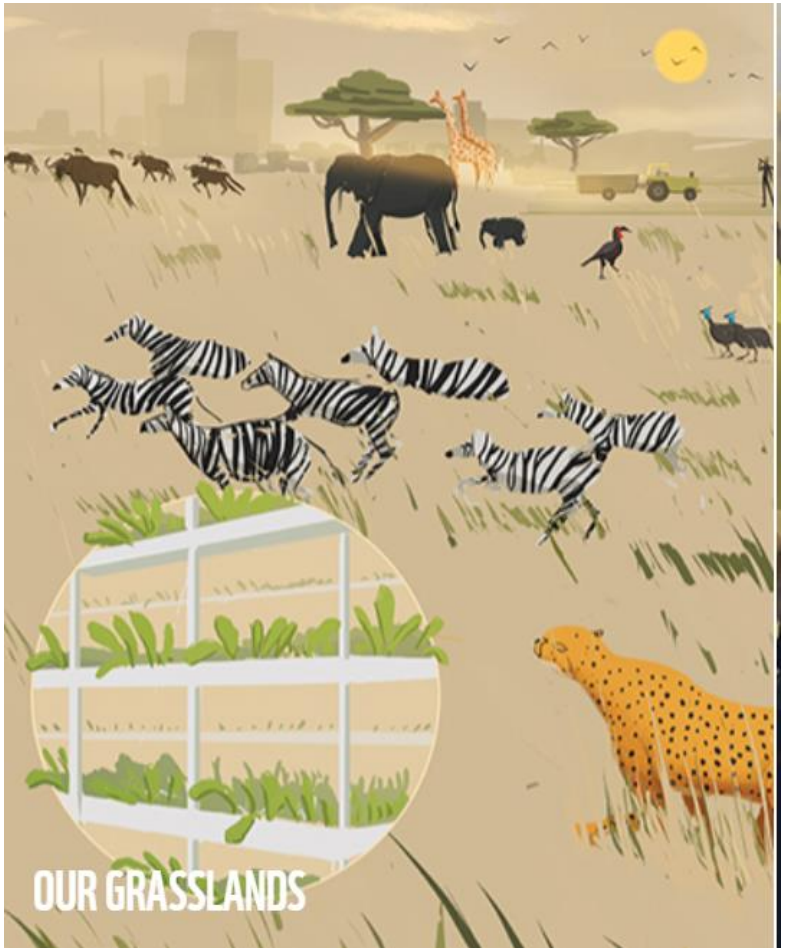
OUR GRASSLANDS

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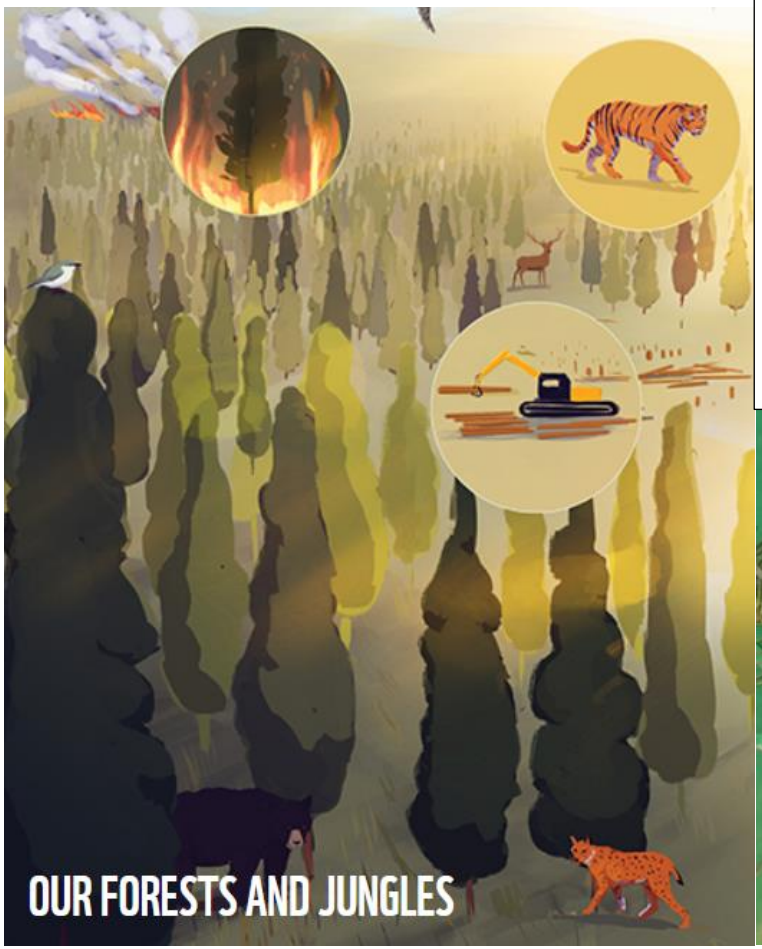

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SUGGESTED AGE RANGE
11 – 16

PACK CONTENTS

Introductory reading: Reporting On Our Living Planet
https://www.wwf.org.uk/sites/default/files/2018-10/LPRYouthFINAL.pdf

Context video: https://youtu.be/ufiiFGdAI5E

WORKSHOP AIMS:

- Build understanding of environmental issues, the links between them, and their connections to lifestyle choices and political systems
- Build understanding of the mechanisms for international decision-making and the challenges that can prevent change
- Strengthen skills in public speaking, and in constructing a strong and persuasive argument
- Strengthen skills in participatory decision-making
- Potential extension activities: creating and delivering a powerpoint, filming and editing a short news segment

SUMMARY

This workshop is designed to immerse participants in the varied and interlinked issues that face our planet, and build their understanding of the complexities involved in bringing about change at a global level. Over the course of a two-hour workshop (with optional preparation and plenary sessions) students take on the roles of 'World Leaders' and 'Our Planet Experts' to roleplay an international summit aimed at defining a sustainable future for our planet.

- **World Leaders** have a fund of **100 Billion 'World Dollars' (WD)**, split equally between the group in 5 Billion tokens. World Leaders are given briefings on food, energy and health. They must decide how to invest the available budget, and what agreements to put in place, in order to ensure a positive future for the world population.
- **Our Planet Experts** split into small groups, each tasked with researching one of the biomes of our planet and then presenting evidence to the world leaders to inform and influence their decisions on how to invest their budget and define the future of society. They are given briefings on the issues facing the biome and the things that need to change for that biome to thrive. Other groups may take on the role of experts for topics that are less obviously environmental concerns, but which affect – and are affected by – the health of our planet.
- Each group of experts presents their case and World Leaders confer to decide where to invest and whether to change their plans for energy, food and health. A round table session allows them to discuss priorities and approaches with experts before drawing up their decisions and budget allocations.
- At the end, the plan is presented by the World Leaders and a discussion or debate is held to determine if it is considered to be a positive way forward for our planet.

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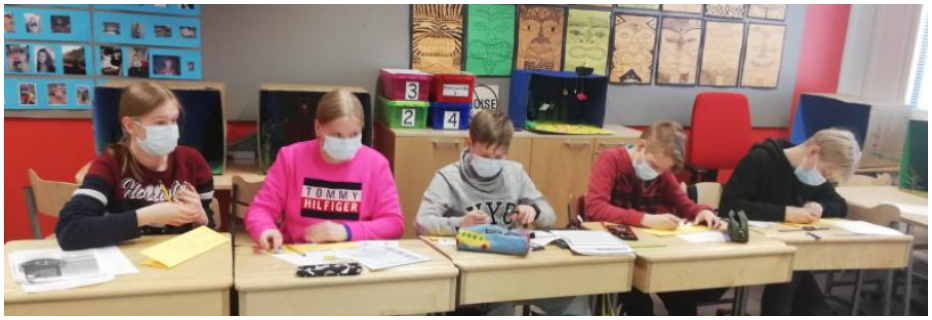
Wednesday 14th April 10.00 to 15.00

Preparation for the Summit Talk "The Future of our Planet"

Session 1: Roles, rules and instructions



WORLD LEADER BRIEFING

As leaders of countries across the planet, you are responsible for the big decisions that will shape the way we live in the future. These decisions will have short term impacts on the lives of the people living today, but will also have longer term impacts on our planet and everything that lives on it.

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OUR PLANET EXPERTS BRIEFING

Your role in the Our Planet Futures Summit is to present information and recommendations around a specialist area and guide the world leaders in making the best course of action for your interests.

Working in pairs or small groups you will research your specialist topic – either a biome of planet earth or an area of human interest – and prepare a presentation that puts a persuasive argument for an action or set of actions that you feel world leaders should undertake.

IF YOU ARE REPRESENTING A BIOME, YOUR ROLE IS TO COMMUNICATE ITS IMPORTANCE, THE CONDITIONS REQUIRED TO ENSURE IT CONTINUES TO PROVIDE BENEFITS TO PEOPLE AND THE PLANET IN THE FUTURE, AND YOUR RECOMMENDATIONS FOR HOW WORLD LEADERS COULD TAKE ACTION TO ENSURE ITS FUTURE.

IF YOU ARE REPRESENTING AN AREA OF HUMAN INTEREST (EG BUSINESS / HEALTH) YOU MAY WISH TO TAKE A STANCE THAT DOES NOT TALLY WITH YOUR GENUINE BELIEFS, BUT WHICH BRINGS INTO THE DEBATE SOME OF THE CONCERNS AND PRIORITIES THAT WORLD LEADERS MAY BE FORCED TO ADDRESS.


HUOMAA HYVÄ!


DR. Pekka Pouta
Frozen world
Prof. Timonen
Frozen worlds


Prof. Nissinen
grassland
Prof. Yeager


Prof. Stigell
Seas
Prof. Cowan
Seas


Prof. Tomioka
Prof. Richards

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Friday 16th April 10.00 to 14.00

World Summit Meeting “The Future of Our Planet”

Meeting with presentations
World Leaders decision
Feedback on the week

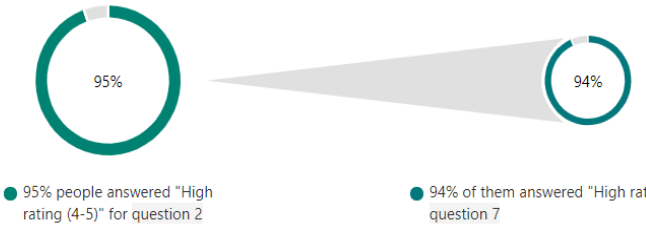
2. How would you rate the MOK week. One star = poor, 5 stars = excellent

More Details Insights

18
Responses

4.44 Average Rating

95% of people rated **High rating (4-5)** for this question, and the majority answered "**High rating (7-10)**" for Question 7.



3. What was your favourite part of the MOK week and why? Please write several sentences for this.

More Details

18
Responses

Latest Responses

"I think the best part of the week was when we made the diorama c

"1. The presentation. 2. The biome making."

"I liked the meeting. And I liked doing the diarama."

5. What was the worst / least interesting part of the week?

More Details

18
Responses

Latest Responses

"The least interesting part of the week was the Mondays talking lesso...

"When school started at 9:00 AM."

"The paper tasks on Monday."

7. Please rate your performance during the week in terms of being active and collaborating with your classmates. One star = poor performance (not very active and not being a good partner or group member) / 10 stars = excellent performance (very active, going over and above the call of duty and being a collaborative and active group member).

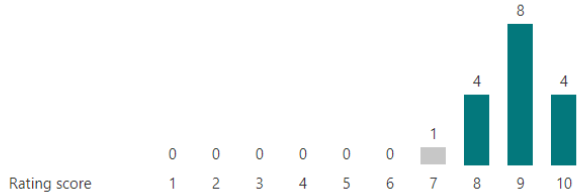
More Details Insights

18
Responses

8.94 Average Rating

94% rated between "**8-10**"

Score distribution



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What did you learn?

I learned more about climate change. I know now more about ice. I know about sea levels and forest as well. I learned more that how you present something.

1. climate change 2. chemistry things 3. how to make diagrams 4. how you can recycle (search from google) 5. how to be a president (kind of)

1. I learned that cows cause a lot of methane. 2. Mountain gorillas are in danger. 3. Grasslands are also savannahs. 4. Poaching became a problem in 1979-1989. 5. Humans are a problem.

1. That almost all of freshwater is underground 2. That 70% of freshwater is snow and ice 3. That 3% of all water in the world is freshwater 4. That manatees can weight 450kg 5. There are many differentiaali types of rainforests

How to present forest' climate change art seas

1.The ice caps are melting so fast. 2. So many animals are endangered. 3. The amount of died animals and coral. 4. About the things we can do to help the climate change. 5. That the cows make so much methane.

almost all of the freshwater is underground only 3% of our waters is freshwater over half of our animals are endangered what a manatee is 70% of the freshwater is frozen.

1. I learned about the climate change 2. I learned new chemistry forms 3. I improved making diagrams 4. I learned how to be a leader 5. I learned how to impact in decisions

1. I learned about the animals that are endangered 2. I learned how long it takes for the ice to melt 3. I learned why we need biodiversity. 4. I learned the importance that we act now 5. I learned that most of the oxygen comes from the ocean.

Almost all of freshwater is underground That 70%of freshwater is snow and ice. 3%of water is freshwater 62% of animals are alredy extinct What a manatee is

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I learned that snow melts quicker when it has no plastic wrap to cover it. I learned that more than 50 million species of animals live in forests and rainforest biomes. I learned how to behave in a meeting and how to cooperate with others when talking in meetings. I learned some new information from other presentations.

More about the climate change, I learned that the greenhouse gases trap the sunlight, I as well learned that so many animals are in danger, it was a little surprising that the polar bears are the most in danger and that climate change is a very big thing.

I learned that the ice melts 9% in 10 years. I learned that Tigers are endangered. I learned that people cut forests so they could farm palm oil trees. I learned that forests set on fire easily because the Earth is warming. I learned that snow melts faster when it has a plastic cover.

1. I learned that the ice caps are melting at the pace of 9% every 10 years. 2. I learned that 68% of all animals have already been extinct. 3. I learned that around 2000 animals are endangered in Finland. 4. I learned that a healthy forest needs wolves. 5. I learned that a entire football pitch of wood is cut down every second.

1. I learned that 68% of animal species have extinct. 2. I learned that half of the oxygen comes from the ocean. 3. That all the animals will be extinct in 100 years if nothing is done to stop it. 4. That blue whales are the most endangered animals. 5. That 70% of fresh water is frozen.

1.Half the planets oxygen comes from the ocean. 2.That blue whales are the most endangered animal species. 3.90% of animalspecies have not been discovered. 4.That 68% of animals are extinct. 5. 2 million animal species live in the ocean.

1. I learned that the ice caps have restored a lot of methane. 2. I learned that 68 percent of all species have been extinct. 3. The ice caps melt 9 percent a decade. 4. That making an electric car produces more CO2 than a petrol car. 5. Many species are endangered.

1. Many animals are getting extinct. 2. The planet has get warmer by 1 degree. 3. 68% of animals are already extinct. 4. If one human makes something good, it makes a impact on earth. 5. IF we don't work now, by year 2050 there is no animals at all.