

Lesson 10



PLANTS AND GLOBAL WARMING

Lesson objective: To teach children about different ways plants suffer because of global warming and human influence. To show them how plants can be used to delay global warming and teach them about green cities.

Terms: plants, global warming, green cities

Materials required for the eco workshop:

collage paper, glue, tempera, ribbons, strings, yoghurt cups, plants, pantyhose, soil, cotton, sawdust, wheat seeds or grass seeds, cardboard.



1. Discussion

10 min. 🕚



Learning To introduce pupils to the lesson. To make pupils think about

objective: global warming.

ACTIVITIES

Teacher: coordinates the activity Pupils: answer the questions

On the screen: animation showing globar warming together with multiple questions with

narration.

2. Interactive task

2 min.



Learning objective:

To introduce the term global warming.

ACTIVITIES

Teacher: coordinates the activity

Pupils: answer the questions and explain their answers

On the screen: pictures describing global warming

3. Discussion

1 min. 🕚



Learning objective:

To ecourage pupils to think about plants.

ACTIVITIES

Teacher: coordinates the activity

Pupils: give their ideas about the subject

On the screen: Picture of healthy plants and picture with bad looking plants appearing

after the discussion

Notes	-		-	-	-	Aller .	-		1	100	B	- 4	100	- 40	-	100	400	-	100	All and	-	100	1	4	00	-	4	-	Alle	1		100
		1		-	1		-	1	1	1		1		4	1	-	L.				-	1	27	-	7		-	1			1.6	1

4. Interactive task

8 min. 🕚



Learning To show pupils all of the main consequences of global warming

objective: for the plants trough a game.

ACTIVITIES

Teacher: coordinates the activity

Pupils: align the pictures in the right order (timeline)

On the screen: timeline.

Arrange the timeline in the correct order!

1. A healthy plant 2. Factory 3. Rise in temperature 4. Dried plant	1. Trees 2. Rise in temperature 3. Trees on fire 4. Tree stumps	1. A healthy plant 2. Rise in temperature 3. Bugs eating a plant 4. Dead plant	1. A healthy tree 2. Rise in temperature 3. Tree bending 4. Uprooted tree
1	2	3	4

5. Information (Audio/text)

1 min. 🕚



Learning To give information about global warming and its positive effect

objective: on plants

ACTIVITIES

Teacher: coordinates the activity Pupils: listen to information

On the screen: Animation showing photosynthesis

Global warming is caused by a variety of factors but one of the main ones is considered to be human influence. Cars and factories produce a lot of different gases that cause the warmth to stay on Earth. One of the main gasses is carbon dioxide.

The interesting thing about the carbon dioxide is that plants actually use it to make oxygen.

6. Discussion

2 min.



Learning objective:

For pupils to think on their own about options for planting plants.

ACTIVITIES

Teacher: coordinates the activity

Pupils: give their ideas about the subject

On the screen: Picture of the city and questions: Where would you plant the plants in the city?

How would it benefit?

7. Information (Audio/text)

1 min. 🕚



Learning

To show possibilities of using plants in the city to delay global

objective: warming. To show where plants can be planted

ACTIVITIES

Teacher: coordinates the activity Pupils: listen to information

On the screen: Images showing "green cities"

Because of factories and cars, cities are major producers of carbon dioxide.

The green areas and parks in cities could make it better.

But cities are already built and we cannot create a park anywhere.

However we can always plant trees near roads.

Or really we could plant in any flat surface.

The surface doesn't even need to be horizontal or flat when we think about it.

And since the cars are one of the biggest producers of carbon dioxide...plants could be planted around highways.

1	Vote	es:		-	V			-	1-		-			Total State	-	10	11110	-	1		(pl.)	4		2	- 7		-	-11	1200	-	-1	1000		1		-	1
V		- 4	M. V	- 5	3	An	118	3	-	da.		9,	-	V	9		da. \	-	8	An	10	3	- 4-	10	25	An	14	9	An	Ve	3 +	An	12	9, 1	de l	- 9	5

8. Interactive task

5 min. 🕚



Learning To strengthen pupils' knowledge and make them think about the

objective: given information.

ACTIVITIES

Teacher: coordinates the activity

Pupils: Drag the correct plant/green surface to the suitable green shape – game is

similar to popular hidden object games

On the screen: Picture showing a grey dirty city. The city becomes gradually greener,

as pupils place plants in it.

9. Eco workshop

25 min. 🕚



Learning To enhance pupils' creativity and teach them how to take care of

objective: plants

ACTIVITIES

Teacher: coordinates the activity, chooses one of the options.

Pupils: make a pot/grass-man.

On the screen: Make your classroom greener. Choose one of the options

a) Make your own pot and plant a plant in it

b) Make a wheat/grass - man

Materials required for the activity: yoghurt cups, plants, pantyhose, soil, cotton, sawdust, wheat seeds or grass seeds,

INO	tes	COLD		The state of	Bill		100	On V		101	(D)		100	SOLA.		-	Bin		-Alba	COLL		A	TOLS:	100	Alle	OL .	101	-00		101	-000		101
-	-	100	1	-		a.			-	-	7	- 17			4. 7	-	7	. 1	-	1	- 1	-	70	-	- 1	70	-	-	Ton	2	-	Ten?	-
																							-						- 0				

10. Interactive task

4 min. (1)



Learning To point out that a lot of organisms suffer because of our

objective: influence.

ACTIVITIES

Teacher: coordinates the activity

Pupils: sort the organisms in two groups: the ones that benefit from pollution and the

ones that are suffer because of it.

On the screen: Picture showing live organisms.

11. Interactive task - quiz

2 min. 🕚



Learning objective:

To test the knowledge pupils' have obtained in this lesson.

ACTIVITIES

Teacher: coordinates the activity

Pupils: choose the answers to the questions and explain their answers.

On the screen: Questions with possible answers.

- 1. How do plants suffer from global warming? (Choose the **incorrect** answer)
 - There are new types of pests
 - Rainfall frequency has changed
 - There is too much oxygen in the air
 - Forest fires and droughts are more often
- 2. How can we help stop the global warming? (Choose the **correct** answer)
 - By making cities browner
 - By making cities greener
 - By making cities greyer
 - By making cities redder

Not	es:	-1			1	1	- 1	-	V	-1	900		-1			-1-		1.0	-10	4 1000	100	10		-	1			1	1			T.
2	-	100	1	100	10 h 20	Alex.	1111000	1 1	1	1	A	100	1000	1	-	Topo d	Alle N	-	100	-	-		-	-	-	-	1777	3 4	Alexander .	11100	1 1	1

12. Eco workshop

25 min. 🕚



Learning objective: To show pupils how big projects can be easily managed when they cooperate. To make them think how their city could become greener.

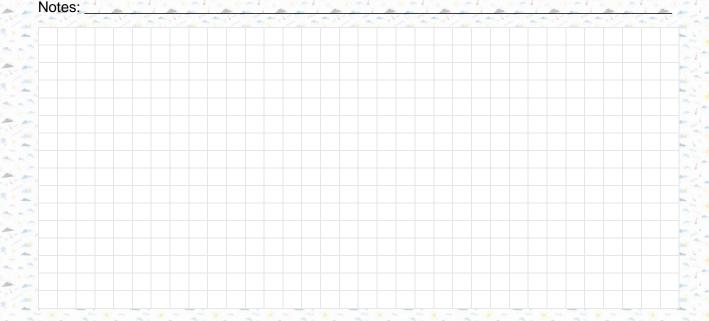
ACTIVITIES

Teacher: coordinates the activity. Pupils: make objects from cardboard.

On the screen: Instructions on how to make the objects

Materials required for the activity: collage paper, glue, tempera, ribbons, strings,

cardboard



Source references:

1) Plants and Climate Change, National Park Service, US Department of Interior, Urban Ecology Research Alliance

Available at: https://www.nps.gov/articles/000/plants-climateimpact.htm#:~:text=Rising%20temperatures%20lead%20to%20more,them%20to%20be%20less%20 productive.

2) Climate basics for kids, C2ES, Centar for Climate and Energy Solution

Available at: https://www.c2es.org/content/climate-basics-for-kids/

3) The positive effect of European green cities, Green Cities Europe

Available at: https://thegreencities.eu/

4) Features of the Future Sustainable City, Rethink The Future

Available at: https://www.re-thinkingthefuture.com/sustainable-architecture/a4252-features-of-the-future-

sustainable-city/



The European Commission support for the production of this curriculum does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.