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## Methodological material/ practical support for teachers on developing student's environmental awareness and "green thinking"

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## Introduction

Today, more and more attention is paid to environmental problems and in recent years these topics have increasingly come into the limelight. Also in education.
We, in this partnership involved partner-institutions from Latvia, Iceland, Romania, Czech Republic, Portugal and Spain, for almost 2 years, each partner separately and all together, learned, explored and created possibilities to become more environment-friendly. We applied the gained knowledge and experience to our curriculums and provided our students with the opportunity to live and study in a natural and green environment and raised student's environmental awareness.

The aim of the project was through project activities to help the partner schools to create a learning environment, which provides the knowledge, skills and attitudes necessary for modern life, and helps to promote students' understanding of the sustainability of the Earth, environmental issues, factors affecting climate change and life in the natural environment.
With the basic idea in mind, following learning/teaching tasks were set:

1. Exploration and building of the awareness about the environment in which we live;
2. Raising of the awareness of environmental sustainability and therewith related activities;
3. Building an understanding of the factors that make up a natural environment and helps to maintain it. Our importance/role in providing it;
4. Implementation of activities and demonstration of methods that can lead students to innovative results based on "green thinking" and sustainability of nature at the core;
5. Sharing of the experiences about activities that can help schools integrate "green practices" into everyday life and support Eco schools to maintain their status;
6. Exchange of good practices on the implementation of the competency-based education, especially in the context of environmental education.
7. Collecting of ideas/experience towards environmental awareness and "green thinking", that have appeared during the project.

Project left an impact on the participants, target groups and other relevant stakeholders, as well as served as a support tool for the project partners, ECO schools themselves. Participants benefited from the exchange of experience and the knowledge and practices gained during the project have been transferred to home institutions.
During the implementation of the project, it was constantly kept in mind that it is very important to promote the awareness of environmental issues and, in relation to this, wide range of activities were carried out - partner countries' teachers and students created environmentally friendly materials from recycled materials and learned how to spare nature diversity and our environment. During the project implementation time teachers and students with the help of practical activities went on expeditions, explored and learned about the history and biodiversity of parks, species of plants and animals, geology of parks, renewable resources etc.

This material summarizes the experience gained during the mobilities in all 6 partner countries. It includes information about activities and methods implemented and we have designed it as an
educational tool for schools to help to implement interdisciplinar approach, with an emphasis on the CLIL, as well as to strengthen student's key competences, rise the level of environmental awareness and "green thinking" and to discover and strengthen student's talents.

It includes descriptions of 51 learning activities/strategies, their photos, activity steps, made results and 3 Annexes.

In this material described project's activities were planed and designed for the directly-involved students, who in the context of this project were aged between 12 and 16 years.

We hope that the material will be useful and you will find in it some good ideas for diversifying the learning process!

# The Description of Learning Activities in Iceland 

C1 mobility, March 15-19, 2022, Grunnskóli Borgjarfjarðar, Varmalandi

Flow learning about Icelandic nature, habitats and geology


The topic of the mobility week: Flow learning about Icelandic nature, habitats and geology.
During the mobility participants were introduced to Grunnskóli Borgjarfjarðar school, Varmaland, as well as its surrounding - the geology of Víðgelmir cave, Hraunfossar and Barnafoss waterfalls, Borgjarfjarðar historical sites and other environmental objects.

Also the participants got to know Iceland's biological diversity - its plants, domestic animals and wild animals. All participants took part in activities on recycling, exploring, collecting, creating new things from the old ones and creating things from natural resources.

During the mobility there were following activities implemented to build up students' environmental awareness:

## Activity No. 1

| Activity name | Workshop: Outdoor game with rope |
| :--- | :--- |
| Activity date | March 15 and 17, 2022, different groups |
| For which subject <br> this activity is <br> recommended | 1. Ice breaking activity <br> 2. Communication, cooperation, problem solving <br> 3. Usually an outdoor action but can be done indoors |
| Useful vocabulary | Environment, environmental, environmentalist, to fight / to combat / to tackle <br> global warming, to protect, to solve, to go green |
| Learning aims | To solve a problem where everybody is equally responsible for the solution. |
| Materials used for | A 15-20 m rope with knots on it. Rules of the game. |
| the activity | 1. Everyone in the group put their hands on the rope. On top of the rope which <br> has been laid on the ground in a circle. There cannot be a knot between the <br> hands of one person. <br> 2. When everybody has the rope in their hands. Check if there is a knot in the <br> wrong place and fix it. There also has to be one person on each end with no knot <br> on the end. <br> 3. Explain rules: a) You cannot release the rope from your hands; b) You can <br> run the rope through your hands without releasing it; c) Now they have to find <br> a way to release all the knots without letting go of their hands. <br> 4. Give time to talk amongst themselves. The whole group has to get to the <br> same idea of how to solve the task. <br> 5. It can be fun to give an exact time to solve this or to take the time and <br> compare with other groups doing the same. <br> 6. If the group solves this correctly without letting go, everyone should have <br> their hands on top of the rope at the end. |

## Pictures

## Results, gained knowledge



Students learn to talk and listen to each other. They learn how to work together to solve a problem. It also gives the opportunity to give them clues when they are stuck. Like take one step back and reevaluate. Remind them that they'll have to work together.

Final result should be a better understanding of the value of working together and looking at problems from different angles.

## Activity No. 2

| Activity name | Workshop: Geology of Iceland and diversity of animals and plants on the <br> island |
| :--- | :--- |
| Activity date | March 15 and 17, 2022, different groups |
| For which subject <br> this activity is <br> recommended | 1. Geology, geography <br> 2. Natural science, biology, ecology and more |
| Useful vocabulary | Geysers, lunar-lake craters, lava-fields, columnar basalt formations, rhyolite <br> mountains, biodiversity, loss of biodiversity, habitat, rare species, endangered <br> species, threatened species. |
| Learning aims | To understand the position and geology of Iceland. Learning about how Iceland <br> is an island and therefore has a very different animal diversity both in domestic <br> and wild animals. |
| Materials used for <br> the activity | Teacher`s presentation: \\ https://www.canva.com/design/DAE68vgpJ6Q/JE4w8c1y- \end{tabular} \\ \hline \begin{tabular}{l}  Tt9d80TQtz9jg/watch?utm_content=DAE68vgpJ6Q\&utm_campaign=designs \\ hare\&utm_medium=link\&utm_source=publishsharelink \end{tabular} \\ \hline \begin{tabular}{l}  1. Teacher`s given presentation with accompanying information about the <br> geographical location of Iceland along with explanation about the fact that it is <br> a volcanic island. |
| Results, gained <br> knowledge | Small group project work, where students have to use the information <br> acquired in the presentation. |
| Students have learned that Iceland is in a volcanic hot spot. What it has been <br> and continues to evolve. That geothermal heat and hot springs are used and <br> appreciated in the country. The students learned about the country's domestic <br> and wild animals and how it has been for centuries due to the island's isolation. |  |

## Activity No. 3

| Activity name | Workshop: Making Rye bread using geothermal heat |
| :---: | :---: |
| Activity date | March 15 and 17, 2023 |
| For which subject this activity is recommended | 1. Home economics <br> 2.Natural science <br> 3. Geology <br> 4. Mathematic <br> 5. Recycling |
| Useful vocabulary | To inhabit, conservation, energy conservation, diverse, geothermal heat. |
| Learning aims | To make a traditional rye bread with geothermal heat. Reading and following a recipe and trying new food. |
| Materials used for the activity | 1.Recipe: <br> Rye bread 1 ltr Buttermilk 480 g rye flour 150 g whole grain flour 130 g flour 1 msk natron ( 34 g ) 115 g brown sugar 300 g syrop 2 tsk salt ( 22 g ). <br> 2. Measuring cups, and bowls <br> 3. Bowl to mix <br> 4. Empty and washed milk carton <br> 5. Geothermal hot spring (or an oven) <br> 6. Patience |
| Activity steps | 1. Make sure the group has the right measurements for the portion they need. Or let them calculate their own portion, like the half or fourth of the whole recipe. <br> 2. Put all the ingredients into a bowl as you measure them correctly. <br> 3. Mix thoroughly, until it looks like wet concrete almost. <br> 4. Put into the milk carton. <br> 5. Bake for 12 hours (or more depending on the heat of the hot spring) on low heat, around $90-100^{\circ} \mathrm{C}$. |
| Pictures |  |


| Results, gained | Students learned how to follow a recipe. Understand the importance of <br> knowledge |
| :--- | :--- |
| measurements and portions. Understanding the use of geothermal heat for <br> centuries in Iceland. Learning that you can recycle milk cartons for baking. <br> Working together. Tasting something new from another country. |  |

## Activity No. 4

| Activity name | Workshop: Exploration and learning about Geology of Vídgelmir - the cave |
| :---: | :---: |
| Activity date | March 16, 2022 |
| For which subject this activity is recommended | 1. Geology, geography <br> 2. Natural science <br> 3. History |
| Useful vocabulary | Geysers, lunar-lake craters, lava-fields, columnar basalt formations, rhyolite mountains, to preserve. |
| Learning aims | - Experience a lava cave. <br> - Learn about the geological development of Iceland. <br> - Experience different kinds of lava. <br> - Experience a total darkness. |
| Materials used for the activity | Winter clothes, good shoes and protected helmets with light. |
| Activity steps | Guided tour with geologists as guides showing different kind of lava formations as well as telling about the history of the cave and its finding |
| Pictures |  |
| Results, gained knowledge | Better understanding of how Iceland is form by volcanic action through the centuries. Common experience with geological understanding. |

## Activity No. 5

| Activity name | Workshop: Exploration of waterfalls, learning about the legend of <br> Hraunfossar and Barnafoss |
| :--- | :--- |
| Activity date | March 16,2022 |


| For which subject this activity is recommended | 1. Geology <br> 2. Geography <br> 3. Natural science |
| :---: | :---: |
| Useful vocabulary | MidAtlantic ridge, geysers, peninsula, glaciers, tectonics, conical volcanoes. |
| Learning aims | Experiencing the difference of different water resources. <br> - Experiencing Icelandic nature. <br> Learning about water running through lava fields. |
| Materials used for the activity | Bus, worksheets (if any) |
| Activity steps | Driving to the place, sharing the understanding of the source of water and exploring of it |
| Pictures |  |
| Results, gained knowledge | A common experience of Icelandic nature and seeing how different the water is because of its source, being from the lava (through it) and/or from the closest glacier. |

## Activity No. 6

| Activity name | Workshop: Sports lesson/game of dodgeball |
| :--- | :--- |
| Activity date | March 17, 2022 in groups |
| For which subject <br> this activity is <br> recommended | 1. Sports <br> 2. Socializing <br> 3. English |
| Useful vocabulary | Competition, communication, collaboration. |
| Learning aims | - Taking part in a sports lesson |
|  | - Working together |
|  | - Communicating |
|  | - Being more comfortable with one another |


| Materials used for <br> the activity | Sports hall, sportswear and a ball |
| :--- | :--- |
| Activity steps | Rules of dodgeball and making teams to work together |
| Pictures |  |
| Results, gained <br> knowledge | Communication in English, socializing and getting to be comfortable with <br> everyone. |

## Activity No. 7

| Activity name | Workshop: Swimming pool |
| :---: | :---: |
| Activity date | March 17-18, 2022 |
| For which subject this activity is recommended | 1. Sports <br> 2. Communication, social skills <br> 3. Geology |
| Useful vocabulary | Geothermal heating, electricity, hydropower, warm pools, renewable energy. |
| Learning aims | - Going to a geothermal pool during winter. <br> - Experience the water. <br> - Interact with others. <br> - Enjoy new experience. |
| Materials used for the activity | Swimming pool, students, swimwear |
| Activity steps | Change into swimwear, experience and have fun |
| Pictures |  |


| Results, gained <br> knowledge | Everyone enjoys a good time in the geothermal water swimming pool in <br> Iceland. Better social skills and bonding. |
| :--- | :--- |

## Activity No. 8

| Activity name | Workshop: Making a board game |
| :---: | :---: |
| Activity date | March 17-18, 2022 |
| For which subject this activity is recommended | 1. Geology, Sports, Natural Science and mathematics <br> 2. Recycling <br> 3. Creativity <br> 4. Remembering knowledge |
| Useful vocabulary | Recycling, to recycle, reuse, sustainability, sustainable |
| Learning aims | To make a board game from the knowledge and experience in Iceland. Designing their own game and rules. |
| Materials used for the activity | Cardboard boxes, paper, scissors, glue, colors, paint, clay, string and whatever the group needs to make their board game. |
| Activity steps | 1. Talking to your group about what the board game should be about. Remembering and talking about what they had learned and experienced during the week. <br> 2. Deciding how the game should be and how the rules should be like. <br> 3. Delegating work to group members and making the game. <br> 4. Trying it out and fixing the things that don't work. |
| Pictures |  |
| Results, gained knowledge | Students learned how to create their own version of a game to remember what they have learned and experienced from what they have to make it from. |

The Description of Learning Activities in Romania

C2 mobility May 2-6, 2022, Scoala Gimnaziala "Aurel Vlaicu", Arad

A world full of natural wonders


The topic of the mobility week: A world full of natural wonders.
During a mobility week in Romania all participants were introduced to the school - Școala Gimnazială "Aurel Vlaicu", Botanical garden in Macea, the Lunca Mureș National Park, Turda Salt Mine, historical places of Arad city.

Also, the participants got to know Romania's biological diversity - plant, tree species, birds, insects, as well as its geology. All participants took part in activities on recycling, exploring, collecting, creating new things from the old ones and creating things from natural resources.

During the mobility there were following activities implemented to build up students' environmental awareness:

## Activity No. 1

| Activity name | Educational introduction game: Welcome to Arad |
| :---: | :---: |
| Activity date | May 2, 2022 |
| For which subject this activity is recommended | 1. Social studies <br> 2. Counseling |
| Useful vocabulary | Natural environment, conservation programme, to protect, to preserve, go green. |
| Learning aims | - To make students get to know each other. <br> - To practice speaking English. <br> - To create a Shield for their own small group. <br> - To create a positive and engaging atmosphere. <br> - To break down barriers between participants. <br> - To encourage communication and collaboration. |
| Materials used for the activity | Markers, watercolors, color pencils, cardboard |
| Activity steps | Students are divided into small groups. <br> During several ice breaker games they get to know each other better. Students are asked to imagine that they are knights trying to save the Nature. Each small group has to find a motto and design their own shield. |
| Pictures |  |
|  |  |


| Results, gained <br> knowledge | A positive and engaging atmosphere was created. The students were able to <br> communicate and collaborate. They were able to create a proper environment <br> for the following activities. The shields that they created were exhibited at the <br> main entrance of the school. |
| :--- | :--- |

## Activity No. 2

| Activity name | Exploration and Learning about Arad |
| :---: | :---: |
| Activity date | May 2, 2022 |
| Target group | Students, age 12-16 |
| For which subject this activity is recommended | 1. Geography <br> 2. History |
| Useful vocabulary | Natural Environment, go green, urban, area, smog, fumes, to evolve, evolution. |
| Learning aims | - To prepare students for the wider world and therefore allow them to embrace more opportunities in confidence. <br> - To share experiences of travel to create memories and friendships that will last a lifetime. |
| Materials used for the activity | Map of Arad |
| Activity steps | Start from Arad Town Hall and get to know the most important buildings, statues, stories and legends in the city centre. |
| Pictures |  |
| Results, gained knowledge | Students have an opportunity to witness and participate in life in another country, to connect with local people and learn about the ways in which they experience the world. |

## Activity No. 3

| Activity name | Creating objects from recyclable materials |
| :--- | :--- |
| Activity date | May 3,2022 |
| Target group | Students, age 12-16 |


| For which subject <br> this activity is <br> recommended | 1. Arts <br> 2. ICT |
| :--- | :--- |
| Useful vocabulary | To reuse, recycle, to solve, biodegradable, safeguard, wildlife preservation |
| Learning aims | - To introduce students to using found and recycled materials. <br> - To create art, encourage creativity, and challenge their creativity and <br> problem-solving skills. <br> - To ask students to create unique and original items using unconventional and <br> waste materials. |
| Materials used for | Cardboard boxes <br> Paper <br> Plastic bottles, Bottle caps <br> Paper clips, etc. <br> Glue/ Scissors/ Markers / Crayons <br> Other art supplies relevant and necessary |
| Activity steps | Students express the importance of recycling. <br> Small groups of 4-5 students are formed. They are presented with the found and <br> recycled materials. <br> Students are encouraged to create new objects from the given materials. <br> Students brainstorm ideas and create new useful materials. |
| Results, gained <br> knowledge | Students understand what recycling means and thus help keep the environment <br> clean by reusing things instead of throwing them away. |

## Activity No. 4

| Activity name | Exploration of species of plants and trees in Botanical Garden in Macea |
| :--- | :--- |
| Activity date | May 3, 2022 |


| For which subject <br> this activity is <br> recommended | 1. Biology <br> 2. Geography |
| :--- | :--- |
| Useful vocabulary | Biodiversity, lack of biodiversity, on foot, habitat, to migrate, climate, to <br> contaminate, to protect, to preserve, ecosystem |
| Learning aims | - To learn about the species of plants and trees that can be found as part of the <br> garden. Some of the species to be found are the Maidenhair tree, the red cedar, <br> the European ash tree or the Pagoda tree. |
| Materials used for <br> the activity | Camera |
| Activity steps | Visit around the Botanical garden to observe the different types of plants. |
| Pictures |  |
| Results, gained |  |
| knowledge |  | | Students learn about the Dendrological park and about the Macea castle, built |
| :--- |
| starting with 1724 by Serbian family Csennovics. Ranked as a historical |
| monument, the castle combines baroque and byzantine elements with details of |
| modern architecture. |

## Activity No. 5

\(\left.$$
\begin{array}{|l|l|}\hline \text { Activity name } & \text { Exploration of the insects in Lunca Mures National Park } \\
\hline \text { Activity date } & \text { May 4, 2022 }\end{array}
$$ \left\lvert\, $$
\begin{array}{ll}\text { For which subject } \\
\text { this activity is } \\
\text { recommended }\end{array}
$$ \quad \begin{array}{l}1. Biology <br>
2. Chemistry <br>

3. Geography\end{array}\right.\right]\)| Useful vocabulary | To protect, to produce, to recycle, endangered species, extinction, dying out, <br> wildlife preservation, natural surroundings, biodiversity, local wildlife |
| :--- | :--- |
| Learning aims | - To protect the animal habitats. <br> - To protect the biodiversity of the natural park. <br> - To recycle paper. |
| - To produce ink. |  |

Materials used for
the activity

| Activity steps | After a brief introduction to the field of recycling, participants are involved in a <br> paper recycling process using old newspapers. <br> By using the abnormal growths of oak trees, called galls, along with water and <br> one more (secret!) ingredient, students are taught how quality ink is produced. |
| :--- | :--- |

## Pictures

Results, knowledge

Old newspapers, oak wood

After a brief introduction to the field of recycling, participants are involved in a paper recycling process using old newspapers.
one more (secret!) ingredient, students are taught how quality ink is produced.


## Activity No. 6

$\left.\begin{array}{|l|l|}\hline \text { Activity name } & \text { Learning activity about Turda Salt Mine } \\ \hline \text { Activity date } & \text { May 5, 2022 }\end{array} \left\lvert\, \begin{array}{ll}\text { For which subject } \\ \text { this activity is } \\ \text { recommended }\end{array} \quad \begin{array}{l}\text { 1. Geology } \\ \text { 2. Geography } \\ \text { 3. History }\end{array}\right.\right]$


## Activity No. 7

$\left.$| Activity name | Educational Quiz about Environment vocabulary: I am Green Contest |
| :--- | :--- |
| Activity date | May 6, 2022 |\(\left|\begin{array}{l}For which subject <br>

this activity is <br>
recommended\end{array} \begin{array}{l}1. English <br>
2. Biology <br>

3. Environmental Studies\end{array}\right|\)| Go green, ecofriendly, environment, global warming, climate change, |
| :--- |
| environmental issues, environmental disaster, environmental problems | \right\rvert\, | Learning aims |
| :--- |
| - To develop students' understanding of the important causes of environmental <br> problems and some solutions. <br> - To develop vocabulary related to climate change and environmental issues. <br> - To assess understanding of previous activities. |
| Materials used for <br> the activity |
| Quiz sheets, Pencils/ Pens, dictionaries or access to online dictionaries |


| Activity steps | Students are grouped according to the country they are from. <br> Each group receives a set of quizzes. <br> Students solve the quizzes. <br> Teachers grade their answers. <br> The first three best scoring countries receive certificates. |
| :--- | :--- |
| Pictures |  |
| Results, gained <br> knowledge | This activity gives good feedback and assesses the students' knowledge <br> acquisition throughout the mobility week. |

# The Description of Learning Activities in Portugal 

C3 mobility, September 19th-23rd, 2022 Escola Antonio Feijo, Ponte de Lima

Nature Friendly Actions



The topic of the mobility week: Nature Friendly Actions
During a mobility week in Portugal all participants were introduced to the school - Escola Antonio Feijo, Área de Paisagem Protegida das Lagoas de Bertiandos e S. Pedro, Viana do Castelo - capital of the upper Minho and Geopark, research centers Oficinas do Padre Himalaya" and "Porta do Mezio" in Arcos de Valdevez and historical places of Ponte de Lima.

Also the participants got to know the local biological diversity - species of plants, trees, birds, insects, international gardens geology, explored and determined rock formation, identified fossils. All participants took part in activities on recycling, exploring, collecting, creating new things from the old ones and creating things from natural resources.

During the mobility there were following activities implemented to build up students' environmental awareness:

## Activity No. 1

| Activity name | Reception for pupils and teachers at Escola António Feijó and Brief presentation ceremony of the different school bodies |
| :---: | :---: |
| Activity date | September 19, 2022 |
| For which subject this activity is recommended | 1. Social studies <br> 2. Music <br> 3. English |
| Useful vocabulary | Environment, natural environment, rural, urban, to go green |
| Learning aims | To get to know about the traditions and customs of Ponte de Lima. To get to know about the local school - traditions, history. To get to know about school life of other partner countries. |
| Materials used for the activity | Music, flags of different countries, anthems of partner countries, sound system |
| Activity steps | Presentation of traditional dances and songs of Portugal Students presented their home tasks about their school life |
| Pictures |  |
| Results, gained knowledge | The students got to know about the school, the Portuguese language and there was a greater interaction among the different students. |

## Activity No. 2

| Activity name | Exploration of town: "Discover Ponte de Lima", learning about different tree species and ecosystem of local environment |
| :---: | :---: |
| Activity date | September 19, 2022 |
| For which subject this activity is recommended | 1. History <br> 2. Geography <br> 3. Natural sciences <br> 4. Physical chemistry <br> 5.Visual Education <br> 6. Portuguese <br> 7. English |
| Useful vocabulary | To go green, natural environment, environmentally friendly, protected species, rare species, endangered species. |
| Learning aims | Know the history of Ponte de Lima, the monuments and natural landscape. |
| Materials used for the activity | Ponte de Lima Map |
| Activity steps | Students have a guided tour of Ponte de Lima, discovering it's beautiful gardens, history, tree species, framed in a historic landscape. |
| Pictures |  |
| Results, gained knowledge | The students had the opportunity to get to know the oldest village in Portugal, its history and natural beauty. |

## Activity No. 3

| Activity name | Workshop - "Printing Nature" at school |
| :--- | :--- |
| Activity date | September 20, 2022 |


| For which subject <br> this activity is <br> recommended | 1. Arts <br> 2. Natural Sciences <br> 3. English |
| :--- | :--- |
| Useful vocabulary | Rich in natural resources, to recycle, to reuse, species of plants, Portugal <br> ecosystem. |
| Learning aims | Collect materials from nature (leaves, twigs, pinecones, nuts, etc.) to be <br> stamped on recycled fabric bags. |
| Materials used for <br> the activity | Recycled fabric bags, fabric paints, sponges, natural objects. |
| Activity steps | The students selected natural objects to perform a stamping on the fabric bags. |
| Pictures |  |
| Results, gained |  |
| knowledge |  |

## Activity No. 4

| Activity name | Exploring à Área de Paisagem Protegida das Lagoas de Bertiandos e S. <br> Pedro |
| :--- | :--- |
| Activity date | September 20, 2022 |
| For which subject <br> this activity is <br> recommended | 1. Natural Sciences <br> 2. Geography <br> 3. English |
| Useful vocabulary | Fauna and flora, natural green space, astronomy, to protect, to preserve, wildlife <br> preservation, protected area, animals' species |
| Learning aims | -To learn about a protected natural (green) space. <br> -To identify the local fauna and flora. <br> -To learn how to collaborate and communicate in teams through sports practice <br> in nature. |
| Materials used for <br> the activity | Map of the protected area, application for species identification, mobile phones |


| Activity steps | 1. The students were divided into two groups, accompanied by a technician from <br> the protected area. <br> 2. They got to know the various plant and animal species that existed. <br> 3. They used an application to identify the various species found. <br> 4. They carried out some sports activities in nature, such as horseback riding, <br> swming in the existing watercourse and ropes track. <br> 5. During the night, the students were able to observe and identify the stars. |
| :--- | :--- |
| Pictures | Students learned about the protected green landscape, the importance of <br> preserving and respecting nature. Students learned how to use the protected <br> spaces responsibly. They explored observation astronomy at night. |
| Results, gained |  |
| knowledge |  |

## Activity No. 5

| Activity name | Exploration and determination of rocks formation and identification of <br> fossils in Viana do Castelo, capital of the upper Minho and Geopark |
| :--- | :--- |
| Activity date | September 21, 2022 |
| For which subject <br> this activity is <br> recommended | 1. Natural Sciences <br> 2. Geography <br> 3. History <br> 4. Arts <br> 5. English |
| Useful vocabulary | Geology, rock formation, nature resources, fossil fuels, sustainability, marine, <br> to inhabit. |
| Learning aims | -To know the history of Viana do Castelo, the monuments and natural <br> landscape. <br> -To know the Geopark of Viana do Castelo, the formation of rocks and <br> identification of fossils. |
| Materials used for <br> the activity | Maps, chests with "Coins", factsheet on the elements observed, pen, paper. |


| Activity steps | The students visited the sanctuary of Santa Luzia, at the highest point of Viana <br> do Castelo, observing the valley of the Lima River and the Atlantic coast. <br> Field trip to the Natural Monument of Alcantilado de Montedor where it takes <br> place or a treasure hunt, to identify aspects and geoforms in the landscape in <br> order to find out its designation. After the completion of the game, a detailed <br> explanation of the points of interest is made, as well as the interpretation of the <br> past of our territory. |
| :--- | :--- |
| Pictures | Students learned about coastal weather peculiarities and a natural landscape. <br> Participants got to know the rock formations through a game. |
| Results, gained |  |
| knowledge |  |

## Activity No. 6

\(\left.\left.$$
\begin{array}{l|l|}\hline \text { Activity name } & \begin{array}{l}\text { Workshops and knowledge about science and research centres "Oficinas } \\
\text { do Padre Himalaya" and "Porta do Mezio", their visit }\end{array} \\
\hline \text { Activity date } & \text { September 22, 2022 }\end{array}
$$ \right\rvert\, $$
\begin{array}{l}\text { For which subject } \\
\text { this activity is } \\
\text { recommended }\end{array}
$$ \begin{array}{l}1. Natural Sciences <br>
2. Geography <br>
3. History <br>
4. Arts <br>

5. English\end{array}\right]\)| Minerals, geology, regions, physics, biodiversity, archaeology, local area, |
| :--- |
| image and sound, green landscape, rural, urban, solar energy. |


| Activity steps | Guided tour of the "Padre Himalaya Workshops" and visualization in the <br> "Hemisfério/Fulldome", a hemispherical dome of high definition projection in <br> $360^{\circ}$ that transports the spectators to authentic "trips" in real time, translating <br> into an unforgettable experience of image and sound. <br> Visit the "Minerals and Rocks" position of countries as far away as Chile, <br> Iceland, Norway, Brazil and many other countries, in addition to the rich and <br> significant contribution of various regions of the territory of mainland and <br> island Portugal. <br> Guided tour of the Biodiversity Park, the Village of the Little Ones, Interpretive <br> Center of the Mezio/Gião Archaeological Area and Rural and Ethnographic <br> Museum. |
| :--- | :--- |
| Pictures | Students explored other natural green landscapes, the importance of their <br> safeguarding and the preservation of the rural and ethnographic space for the <br> patrimonial and cultural identity. |
| Results, gained |  |
| knowledge |  |

## Activity No. 7

| Activity name | Exploration and work on how to describe the best garden of the <br> International Garden Festival at Ponte de Lima |
| :--- | :--- |
| Activity date | September 22, 2022 |


| Pictures | Students learned how to evaluate differently made gardens, they explored and <br> learned to compare the plant species and their peculiarities. <br> Students learned how to convey through the construction of gardens the <br> concerns with Climate Change. |
| :--- | :--- |
| Results, gained <br> knowledge |  |

## Activity No. 8

| Activity name | Workshop: "Exploring of the toy museum" and canoeing to explore water birds' <br> species |
| :--- | :--- |
| Activity date | September 23, 2022 |
| For which subject <br> this activity is <br> recommended | 1. History <br> 2. Geography <br> 3. English <br> To migrate, rare species, native wildlife, local wildlife protected species, extinct <br> species, endangered species, evolution, to evolve, to thrive |
| Useful vocabulary |  |
| Le travel through the Portuguese toy manufacturers, from the late nineteenth |  |
| century to 1986. Acquaintance with local waterfowl species. |  |
| In two groups, participants took a guided tour of the toy exhibition, with an |  |
| explanation of the manufacturing methods and materials used. Later all the |  |
| participants, using canoes, went to get to know the local species of water birds. |  |

## Results, gained knowledge

The participants got to know the different toys produced in Portugal, from the late nineteenth century to 1986, following the evolution of the materials used and the different manufacturing techniques, such as tinplate rattles, wooden beach buckets, paper pulp dolls, vans, boats, trains, tricycles and pedal cars.
During the canoeing students observed the local fauna and tried to identify similarities and differences in bird species with the species in their country.

## Activity No. 9

| Activity name | Workshop on the reuse of coffee grounds (organic waste) and water analysis |
| :--- | :--- |
| Activity date | September 23, 2022 |
| For which subject <br> this activity is <br> recommended | 1. Natural Sciences <br> 2. Chemistry <br> 3. English |
| Useful vocabulary | Fertilizer, soil, grounds, organic waste, to reuse, to recycle, to preserve, <br> sustainability, nature resources, quality of water. |
| Learning aims | Reuse of coffee grounds (organic waste) for the production of natural fertilizer. |
| Materials used for | Coffee grounds (organic waste), water, plastic bottles, paper filter, funnel, <br> goblet, pipettes, reagents. |
| Activity steps | In the laboratory of science and physical chemistry, by reusing the coffee <br> grounds (organic waste), students learn how to make natural fertilizer and its <br> application on trees and plants. <br> In order to make the natural fertilizer from the coffee grounds, students follow <br> the instructions: <br> 1. The coffee grounds should be dried in a greenhouse for 20 minutes in the sun. <br> 2. After drying, it is in a position to be made into a natural fertilizer: for 1L of <br> water 3 tablespoons of coffee grounds is mixed. <br> 3. This mixture should be fermented in a dark place for 4 days. <br> 4. After 4 days it is ready to be placed directly on the plants or in the form of <br> spraying. <br> Check the state of the water, whether it is of good quality or not. |

Pictures
Results, gained

knowledge | The students learned how to reuse coffee grounds in the production of natural |
| :--- |
| fertilizers. |
| Students identified some water pollutants. |

Activity No. 10

| Activity name | Workshop: Defoliate the corn with folk music from as one of the <br> traditions of Ponte de Lima |
| :--- | :--- |
| Activity date | September 23 ${ }^{\text {rd }, 2022}$ |
| For which subject <br> this activity is <br> recommended | 1. Natural Sciences <br> 2. Geography <br> 3. History <br> 4. Arts <br> 5. English |
| Useful vocabulary | Defoliation, corns, local ecosystem, local environment, fraternization, <br> harvesting |
| Learning aims | -To know the traditions of Ponte de Lima in the context of the corn harvest. <br> -Get to know the folklore of Ponte de Lima. |
| Materials used for | -Allow socialization among participants. |
| Corn plant, traditional materials used in defoliation, traditional instruments and |  |
| costumes from local folklore, regional products. |  |$|$| Activity steps | 1. In the school garden the participants harvested the corn to defoliate it. <br> 2. This moment was accompanied by a local folk group that played and danced <br> for the participants. <br> 3. The activity ended with the fraternization of regional products, made by the <br> parents of the Portuguese students. |
| :--- | :--- |


| Pictures |
| :--- | :--- |
| Results, gained |
| knowledge |$\quad$| Students learned about local traditions related to the harvest of corn, folklore |
| :--- |
| and local gastronomy, providing an interconnection between the local |
| environment, the culture and the environment. |

# The Description of Learning Activities in Spain 

C4 mobility, November 21-25, 2022, E.S.Las Marinas, Roquetas de Mar

Achieving the 3 R's - Reduce, Reuse, Recycle



The topic of the mobility week: Achieving the 3 R's - Reduce, Reuse, Recycle
During a mobility week in Portugal all participants were introduced to the school - E.S.Las Marinas, Plataforma Solar de Almería, Mines in Lucainena de las Torres, Kimitec Almeria, Nature park of Cabo de Gata, Nature park of Punta Entinas-Sabinar, historical places of Roquetas de Mar.

The participants were introduced to the ecosystem of the local environment, plants, species, birds, insects, learned about different solar energy concentrating technologies. All participants took part in activities on recycling, exploring, collecting, creating new things from the old ones and creating things from natural resources.

During the mobility there were following activities implemented to build up students' environmental awareness:

## Activity No. 1

| Activity name | Creating groups for activities |
| :--- | :--- |
| Activity date | November 21, 2022 |
| For which subject <br> this activity is <br> recommended | Any subject in which groups are appropriate to work- English, Science, <br> Geography |
| Useful vocabulary | To reuse, to recycle, to reduce, go green, environment, environmental, <br> sustainability, sustainable. |
| Learning aims | -To practice speaking English. <br> -To get to know each other. <br> -To form intercultural groups. <br> -To break down barriers between students and boost communication. |
| Materials used for <br> the activity | Cardboard, markers, paper, pins, recycled envelopes and bags. |
| Activity steps | Each country chooses a small bag and they take one of the pieces inside, which <br> tasks. <br> Then they write their names together with the rest of the students in the group, <br> who are not from their country. |
| Pictures |  |


| Results, gained <br> knowledge | Heterogeneous groups were created and the atmosphere got more relaxed. |
| :--- | :--- |

## Activity No. 2

| Activity name | Making reusable lunch bags |
| :--- | :--- |
| Date and place of <br> activity | November 21, 2022 |
| For which subject <br> this activity is <br> recommended | 1. Arts <br> 2. Technology |
| Useful vocabulary | To reuse, to recycle, to reduce, go green, environment, environmental, <br> sustainability, sustainable. |
| Learning aims | -To reflect upon the importance of reusing materials. <br> -To reduce the amount of waste. |
| Materials used for |  |
| the activity | Used oilcloths, silicone guns, glue, scissors, markers, Velcro. |
| Activity steps | Students use a model to cut their oilcloths and follow the next steps to create <br> their own bag for sandwiches. They fold their oilcloths and glue all the parts <br> together. |
| Results | Students made a practical item they will use during the week in Spain and even <br> later. <br> Students become perfectly aware of what reusing is and how useful new <br> recycled items may be. |

## Activity No. 3

| Activity name | Educational activity to Plataforma Solar de Almería |
| :--- | :--- |
| Activity date | November 22, 2022 |
| For which subject <br> this activity is <br> recommended | 1. Technology <br> 2. Science |
| Useful vocabulary | Solar power, atmosphere, ozone layer, greenhouse gas, greenhouse effect, wind <br> erosion, energy-efficient, wind turbine, wind farm, renewable energy |


| Learning aims | -To learn about the different technologies that are dedicated to concentrating <br> solar power. <br> -To observe some demonstrations of the scientific processes carried out at the <br> PSA. |
| :--- | :--- |
| Materials used for <br> the activity | Pens and paper |
| Activity steps | Visit around the Solar Platform in Tabernas desert, Almería. |
| Pictures |  |
| Results, gained <br> knowledge | Students learn how solar power is concentrated through different processes and <br> what it is used for. |

## Activity No. 4

| Activity name | Exploration and learning about Mines in Lucainena de las Torres |
| :--- | :--- |
| Activity date | November 22, 2022 |
| For which subject <br> this activity is <br> recommended | 1. Science <br> 2. Geography <br> 3. History |
| Useful vocabulary | Minerals, natural resources. |
| Learning aims | -To learn how minerals were extracted in the past. <br> -To reflect upon the mining history of the country, comparing it to other <br> European countries. <br> -To observe nature around different areas in Almeria. |
| Materials used for <br> the activity | Paper and mobile phones |
| Activity steps | Guided tour around a town with a rich mining history and a wonderful natural <br> environment. |
| Pictures | Students learn more about mining and about the great differences as regards <br> nature in different areas of Almeria. <br> They learned how minerals have been mined. <br> They socialized with each other during walks around time and lunch together. |
| Results, gained <br> knowledge |  |

## Activity No. 5

| Activity name | The 3 R's of Sustainability Workshop |
| :--- | :--- |
| Activity date | November 23, 2022 |
| For which subject <br> this activity is <br> recommended | 1. Arts <br> 2. English <br> 3. French |
| Useful vocabulary | To reduce, to reuse, to recycle, sustainable, sustainability, to preserve, <br> preservation. |
| Learning aims |  |
| -To reuse materials to make useful tools. |  |
| -To improve creativity. |  |
| -To improve their writing and creative skills in English. |  |, | Ink, scissors, rubbers, foam rubbers, paper, pens, pencils, bottle caps. |
| :--- |
| Materials used for |
| the activity |$\quad$| -Students sit down together in groups. |
| :--- |
| -They learn how to create their own stamps. |
| -They create some stamps. |
| -They make a small booklet. |
| -They invent and write a story using the booklet and stamps they have made. |

## Activity No. 6

\(\left.\begin{array}{|l|l|}\hline Activity name \& Exploration and Educational guided tour to Kimitec <br>
\hline Activity date \& November 23, 2022 <br>
\hline For which subject \& 1. Science <br>
this activity is <br>
recommended \& 2. Technology <br>
3. ICT <br>
4. Biology <br>

5. Maths\end{array}\right]\)| Nature resources, sustainability, plant development, meristems, innovative |
| :--- |
| biotechnology, hydroponic. |


| Learning aims | -To learn about the most important economic activity in the area. <br> -To reflect upon the impact of this activity on nature. <br> -To observe alternative agricultural solutions which are not prejudicial to the <br> environment. <br> -To raise awareness on the responsible management of global resources. |
| :--- | :--- |
| Materials used for <br> the activity | Photographs, paper and pen. <br> Sctivity steps <br> Students visit Kimitec, a local company and receive a guided tour of <br> information about the use of plant development - meristems. |
| Pictures | Students learn about the importance of developing activities in the most <br> sustainable way. <br> Students learned about plant development in meristems. <br> Students gained insight about innovative biotechnologies. |
| Results, gained <br> knowledge |  |

## Activity No. 7

| Activity name | Photo Challenge in Cabo de Gata |
| :--- | :--- |
| Activity date | November 24, 2022 |
| For which subject <br> this activity is <br> recommended (at <br> school during <br> school year) | 1. Science <br> 2. PE |
| Useful vocabulary | Local nature, environmental, to protect, to preserve, entomology. |
| Learning aims | To observe, value and respect nature around different areas in Almeria. |
| Materials used for <br> the activity | Mobile phones |
| Activity steps | Students are given some instructions detailing aspects of nature around them <br> they have to take photos of. |
| Results, gained <br> knowledge | Students and teachers enjoy a wonderful day surrounded by an impressive <br> landscape with beautiful beaches and rock formations. <br> Students learn more about the great differences as regards nature in different <br> areas of Almeria. |

## Activity No. 8

| Activity name | Expedition to Punta Entinas-Sabinar and Workshop: "Insects and other <br> species in the school garden" |
| :--- | :--- |
| Activity date | November 25, 2022 |
| For which subject <br> this activity is <br> recommended | Science |
| Useful vocabulary | Protected species of animals and plants, the use of swamp, ecosystem of swamp, <br> local wildlife, entomology |
| Learning aims | To observe, value and respect nature around different areas in Almeria. |
| Materials used for <br> the activity | Paper, pens, mobile phones, microscopes. |
| Activity steps | 1.Students go walking to the natural park just next to the school. <br> 2.They form groups and receive the instructions of the activity, which consists <br> in scanning with a google application that determines different plants, insects <br> and birds in the area. <br> 3. Once they get the information, they have to write it down on the papers they <br> received. |
| Pictures | Results, gained <br> knowledge |
| Students learn more about the area in which the school is and they become <br> aware of how close they are to nature and how important it is to take care of it. <br> Students discovered what species of insects are found in a swamp area and <br> school's garden. |  |

## The Description of Learning Activities in Latvia

C5 mobility, March 20-24, 2023, Aizupe Elementary School, Jelgava Local Municipality

Mother Nature

The topic of the mobility week: Mother Nature.
During the mobility participants were introduced to Aizupe Primary School, Kemeri Nature park, Turaida Museum Reserve, Safari park "More", Riga Zoo, the historical places of Jelgava, Turaida and Riga.

The participants got to know about the local ecosystems - rare, endangered and invasive plants, trees, animals' and birds' species and everyone took part in activities on recycling, exploring, collecting, creating new things from the old materials and creating things from natural resources.

During the mobility there were following activities implemented to build up students' environmental awareness:

## Activity No. 1

| Activity name | Workshop: Creation of Musical instrument - percussion instrument |
| :--- | :--- |
| Activity date | March 21, 2023 |
| For which subject <br> this activity is <br> recommended | 1.Design and Technologies <br> 2.Music <br> 3.English |
| Useful vocabulary | To reuse, to recycle, to protect, mother nature, sustainable, sustainability |
| Learning aims | -To make musical instruments for Music lessons from recycled materials. <br> -To understand the possibility of the second use of materials. <br> -To create understanding about the preservation of nature resources. |
| Materials used | Scissors, thread, two circular fabric pieces, hogweed stem, buckwheat, groats, <br> barley, salt, grain, rye or other grits. |
| Activity steps | 1. Place one of the circular fabric pieces onto one end of the hogweed stem so <br> that it covers it as shown in the picture below. When that is done, tighten that <br> fabric with the thread. <br> 2. Pour the grits in the other end of the stem. <br> 3. Tighten the other end. <br> 4. Cut down remaining fabric that pokes out through the inner side of tightened <br> thread. <br> 5. When everyone will have finished making their own instrument, exercise - <br> everyone has to gather together in group and make a musical rhythm together! |
| Pictures | $\mid$ |


| Results, gained <br> knowledge | Students have learned how to make simple percussion instruments and how to <br> use them in Music lessons to improve rhythm skills. <br> Students learned how to design different forms of musical instruments from <br> recycled materials. |
| :--- | :--- |
| Learned skills: creativity, cooperation, to know European culture. |  |

## Activity No. 2

| Activity name | Workshop "Smell, touch, feel, guess" |
| :---: | :---: |
| Activity date | March 21,2023 |
| For which subject this activity is recommended | 1.Biology <br> 2.Geography <br> 3.English |
| Useful vocabulary | Natural, eco-friendly, species, medicinal plants or herbs, salvia, camomile, parsley, peppermint, lavender, rosemary, pine needles and buds, coriander, European spruce tree needles, fabrics, linen fabrics, smell, touch, feel, guess, photosynthesis, food chain. |
| Learning aims | -To learn about plants of Latvia. <br> -To recognize rare plants, spices, their growing places comparing with other countries. <br> -To find out general similarities and differences of plants. |
| Materials used for the activity | Fabric linen or cotton bags, different herbs and spices, boxes to put the bags with spices and herbs in, linen cords, number sticked to each sample/bag, prepared worksheet (see the example in Annex 2). |
| Activity steps | 1.Smell each fabric bag and by smelling and touching recognize each smell according to its number. <br> 2.Write the number and the name next to each picture. |
| Pictures |  |
| Results, gained knowledge | Students learned how to recognize different herbs, plants. They compared the similarities and differences of plants of other countries. <br> Students found out about man's sensory organ importance in a recognition of plants. |

## Activity No. 3

| Activity name | English Alphabet from recycled materials |
| :--- | :--- |
| Activity date | March 21,2023 |


| For which subject <br> this activity is <br> recommended | 1.Design and Technologies <br> 2.Maths <br> 3.Visual Arts <br> 4.English |
| :--- | :--- |
| Useful vocabulary | Species of trees: oak, lime tree, birch, willow. Recycled, shapes, wood peel, <br> peel off, reuse, round lines of the tree core, material for the environment and <br> health. |
| Learning aims | -To make an Alphabet for preschool children and young learners' groups in <br> order to improve vocabulary skills in Latvian and English language learning. <br> -To develop muscles of hands for young learners during activity of preparing <br> alphabet letters. |
| Materials used for | Special markers for fabrics, wood, metal. Temperature controlled soldering <br> station, cotton fabrics, wood, thread, needle, scissors, ruler, pencil, eraser. <br> Materials for filling the letters of fabrics: different grains - corns, buckwheat, <br> rice etc. |
| 1.Each team must make 4 letters from fabric and 4 letters from wood. The fabric |  |
| letters are already cut. Students need to fill them with one of the given materials |  |
| and sew up the place through which filled. |  |
| 2.For wooden letters, students choose burning or drawing with colours. |  |
| If students choose to burn, we remind them about safety! |  |
| -Place the ignition device in a stable place. |  |
| -Choose 500 degrees for burning. |  |
| -Do not check if the device is hot by touching it with your hands. |  |

## Activity No. 4

| Activity name | A necklace from recycled materials |
| :---: | :---: |
| Activity date | March 22,2023 |
| For which subject this activity is recommended | 1.Design and Technologies <br> 2.Visual Arts <br> 3.Maths <br> 4.English |
| Useful vocabulary | Recycle, reuse, shape, triangle, rectangle, oval, square form, paint, donate, natural, reuse |
| Learning aims | -To create a wooden necklace from recycled materials. <br> -To develop concentration skills. <br> -To know how to use nature materials in everyday life. |
| Materials used for the activity | Piece of wood, plastic or wooden beads, strings of different colours, scissors, rulers, temperature controlled soldering station, glue gun. |
| Activity steps | 1. Students can choose their piece of wood. <br> 2. Create a shape and drill a hole. <br> 3. Light their name, symbol... (free choice). <br> 4. Wrap the string. <br> 5. Add the beads. <br> 6. If the beads fall off the string, a glue gun can be used. |
| Pictures |  |
| Results, gained knowledge | Students learned how to make necklaces from different recycled materials. Students improved concentration skills. <br> Learned skills: creativity, cooperation, to get to know European Culture. |

## Activity No. 5

| Activity name | Game: Let's get to know the Latvian eco-system |
| :--- | :--- |
| Activity date | March 22, 2023 |
| For which subject <br> this activity is <br> recommended | 1.Biology <br> 2.Geography <br> 3.English |


| Useful vocabulary | Eco-system, species, wildlife, plants characteristics, extinction, succession, <br> climate change, food chain, fertilize, amphibians, reptiles, mammals, insects, <br> living creature, endangered species, compost, biodiversity. |
| :--- | :--- |
| Learning aims | Explore the forest ecosystem in Latvia - mushroom, plant, animal species. <br> Compare the ecosystem of Latvia with the ecosystem of other European <br> countries. <br> To improve the knowledge of English language with the help of names of <br> species. |
| Materials used for |  |
| the activity | Prepared cards with pictures of forest, meadow plants, trees, animals and birds <br> and their names in Latvian, English and Latin languages (see the example of the <br> cards in Annex 3). |
| Activity steps | This game is played according to the rules of Domino: <br> 1.Every player chooses three cards. Every card has a picture and a word on it <br> that relates to the ecosystem - plant, animal etc. <br> 2.Players have to take turns placing the dominos, pictures next to the name <br> describes them. <br> 3.In the case none of the players have the right card, they have to take turns <br> picking up dominos from the leftover card pile. <br> 4.In the case the domino forms a square you have to start a square next to it <br> using the card you want. <br> 5.The winner is the player who is first to place all the dominos in their hands on <br> the table. <br> It can be played in groups of 5-7 students. |
| Pictures | The students learned what animals and plants can be found in Latvian forests <br> and meadows, learned about the peculiarities of ecosystems in Latvia and <br> compared them with ecosystems in other countries. <br> Acquired skills: creativity, cooperation, familiarization with European culture. |
| Results, gained |  |
| knowledge |  |

## Activity No. 6

| Activity name | Creating of game: "Wonderful Birds" |
| :---: | :---: |
| Activity date | March 22, 2023 |
| For which subject this activity is recommended | 1.Biology <br> 2.Design and Technologies <br> 3.English |
| Useful vocabulary | Bird species, endangered, extinction, rare species, pollution, ornithological, Bee-hummingbird, Goldcrest, European bird, Mute swan, African ostrich, national bird of Latvia, White wagtail, Nightingale, Woodlark, Blackbird, Common Crane, Wood pigeon, Starling, Swallow, Marsh Warbler, Cuckoo. |
| Learning aims | This is a game that will give you the opportunity to test or learn knowledge about birds found in Latvia. It is designed to be played in a small group. In case the game participants do not feel like "bird experts", then before starting the game, it is recommended to familiarize yourself with the information in the questions and answers in order to gain knowledge. |
| Materials used for the activity | A4/A3 paper sheet, coloured paper, game dice, rolling dice, markers, scissors, rulers, glue, coloured pencils, field templates - blanks, images of numbers, images of "promotional awards", cards of different colour questions and answers, QR code stickers with game rules. |
| Activity steps | Students create the game according to given example: |
|  |  |

Once the game board and game cards are created, all participants start playing the game by following these steps:
1.The players move the figures on the playing fields in the order of their numbering, according to the number of points rolled with the dice.
2.Arrows are placed in certain areas of the game, which allow you to move forward or backward at once through several playing fields.
3.When the game piece has been moved according to the number of points thrown, the player must answer the question of who is "hiding" under the respective field. The questions can be found on the prepared cards. The correct answer is given on the second side of the card.
4.The participant can continue the game, if the answer is correct.

The participant must skip one move, if the answer is not correct.

|  | 5.The winner is the participant who reaches the end point first. There are no <br> questions at certain playing fields, but "promotional prizes", to give players <br> more excitement. <br> See the presentation about birds' species and creating of the game "Wonderful <br> Birds" here: https://docs.google.com/presentation/d/1QAVe6PDR5dtL- <br> PomEtk8k2Qu8BmduVd/edit\#slide=id.p1 |
| :--- | :--- |
| Pictures |  |
|  |  |
| Results, gained |  |
| knowledge |  | | Students got to know different bird species of Latvia and created game as a |
| :--- |
| methodological material for Biology lessons. |
| They learned how to recognize birds" species according to their singing and |
| their appearance. |
| Learned skills: creativity, cooperation, to get to know European Culture, |
| ornithology. |

## Activity No. 7

| Activity name | The expedition to a territory of Kemeri National Park and to high-type bog <br> "Lielais Kemeru tïrelis" (the Great Kemeri Bog) |
| :--- | :--- |
| Activity date | March 22, 2023 |
| Target group | Age group 12-16 |
| For which subject <br> this activity is <br> recommended | 1.Biology <br> 2.Geography |
| 3.Sports <br> 4.English |  |
| Useful vocabulary | Pedobiology, analytical determination of soil parameters, plants ecology, crop <br> production, invasive, to protect, reforestation, nature resources, swamp, coastal <br> erosion, soil erosion, sphagnum moss, algae. |


| Learning aims | -To find out about the history of the national park, to explore the territory of the park. <br> -To get knowledge about swamps of Latvia. <br> -To explore the soil near the seaside. <br> -To find out about invasive plants' species in Nature parks. |
| :---: | :---: |
| Materials used for the activity | Gloves, boots, shovels, warm clothes. |
| Activity steps | On the beach of Jaunkemeri: <br> 1.The students puted on gloves, took shovels and went to weed the beautiful but invasive rose "Rosa Rugosa in order to limit its spread in the white and gray dunes of the Baltic Sea coast. <br> 2.After the cleanup, students and teachers went to the footpaths of Great Ķemeri Bog to get to explore the sphagnum moss untouched by human activity. |
| Pictures |  |
| Results, gained knowledge | Students learned about the main ecosystems of the territory - swamps, wet forests, waters, the sea coast, invasive plants as well as the ecosystems of Latvia. Students learned how to recognize the living organisms of different ecosystems. |

## Activity No. 8

| Activity name | Game: Find out more about the history of Latvia |
| :--- | :--- |
| Activity date | March 23, 2023 |
| For which subject <br> this activity is <br> recommended | 1.Geography <br> 2.English <br> 3.History <br> 4.Sports |


| Useful vocabulary | Eco Community, eco-village, ancestors, clear cut, minimize, habitat, Eco-map, <br> waste, zero-emission, eco-friendly, pollute, green, global warming, meadows, <br> highlands, lowlands in Latvia, on foot. |
| :--- | :--- |
| Learning aims | To get to know the history of Latvia with the help of an orientation game. |
| Materials used for |  |
| the activity | Map of Turaida Museum Reservoir, paper sheet A4, pencils, pens, outdoor <br> clothes. |
| Activity steps | 1. Students are divided in groups of 4. <br> 2. Each group receives a map with the objects that are in Turaida Museum <br> Reservoir. <br> 3. Each group have to find all objects that are marked in a map. <br> 4. The team who finds all objects first, wins the game. |
| Pictures |  |
| Results |  |
| Gained knowledge | Students learned about the history of Latvia, explored national costumes, <br> traditions, got to know European Culture, history. <br> Learned skills: communication, cooperation. |

## Activity No. 9

| Activity name | Educational excursion about captive-bred deer species in Latvia with a <br> guide in the safari park "More" |
| :--- | :--- |
| Activity date | March 23, 2023 |$|$| For which subject |
| :--- |
| this activity is <br> recommended | | 1.Biology |
| :--- |
| 2.Geography |
| 3.English |


| Useful vocabulary | Species, red deer (hind/hart), moose (cow/bull), roe deer (doe/buck), reindeer, <br> fallow deer, elk, mud, tropical species, mammals, forest biotic risk, weather <br> conditions monitoring, habitats, extinction, protection, wildlife, adaptation, <br> horns, antlers, to protect, on foot. |
| :--- | :--- |
| Learning aims | To learn about representatives of the deer family (Cervidae) and their species in <br> Latvia (wild, captive-bred), their peculiarities, characteristics, footprints etc. |
| Materials used for <br> the activity | Comfortable and warm clothes, boots. |
| Activity steps | The students were introduced to the representatives of the deer family <br> (Cervidae) that can be found in the forests of Latvia, their habits, peculiarities <br> and living conditions, as well as learned about species that are kept for economic <br> gain and the possibilities of their use (zero residue production). |
| Pictures | 1 |
| Results, gained |  |
| knowledge | Students and teachers explored different deer species and their peculiarities, got <br> to know about introduced deer species and their adaptation in Latvian climate. <br> Learned skills: critical thinking, creativity, entrepreneurship. |

## Activity No. 10

| Activity name | Workshop: Building a birdhouses |
| :--- | :--- |
| Activity date | March 24, 2023 |
| For which subject | 1.Biology <br> this activity is <br> recommended |
| 2.Geography <br> 3.Design and Technologies <br> 4.English |  |


| Useful vocabulary | Nest destroyers, cavity amps, tin, roofing material, nails, wires, to attach, to tie, <br> sizes, wood material, design, weatherproof, sustainable birdhouses, breeding, <br> soil fertilization, ornithophily, biodiversity, observation, pest control, weed <br> control, pollinate flowering plants, helping environment, wildlife preservation. |
| :--- | :--- |
| Learning aims | With the help of instruction to learn how to make birdhouses from wood. <br> To develop design and technologies skills. <br> To build the skills about nature preservation and taking care of birds. |
| Materials used for <br> the activity | Stencils, ready-made pieces of wood, hammers, nails, wires, instruction list. <br> 1. According to the instructions, students build birdhouses from the given <br> materials - 5 pieces of wood - ready-made material. <br> 2. When the house is nailed, a nail is driven halfway into both sides of the house <br> and a hanging mechanism is provided using a wire. |
| Pictures |  |
| Results, gained |  |
| knowledge |  |

# The Description of Learning Activities in Czech Republic 

C6 mobility, May 15-19, 2023, Základní škola a mateřská škola Kamenicky Šenov

Our Natural Environment



The topic of the mobility week: Our Natural Environment
During a mobility week in Czech Republic all participants were introduced to the school - Základní škola a mateřská škola, Kamenicky Šenov, glass company Preciosa, Jetřichovice National Park, soap factory in Růžová, Růženka tower, Panská skála, Crystal temple in Kunratice u Cvikova, Modlivý důl in Svojkov around Nový Bor town, Museum in Česká Lípa, Diamo company in Stráž p. Ralskem, Nový Oldřichov, Volfartice, Šauštein ruins.

The participants were introduced to local flora and fauna, geological structure of non-living nature, geological past of the national park areas and determinating minerals, similar geographical places and minerals important to the local economy, their extraction. All participants took part in activities on recycling, exploring, collecting, creating new things from the old ones and creating things from natural resources.

During the mobility there were following activities implemented to build up students' environmental awareness:

## Activity No. 1

| Activity name | Discovery activity "Ten similarities" |
| :---: | :---: |
| Activity date | May 15, 2023 |
| For which subject this activity is recommended | 1.Geography <br> 2.Civics <br> 3.Foreign languages |
| Useful vocabulary about environment | Developing country, ecosystem, rural, urban, go green, natural environment, environmental, geology |
| Learning aims | To learn about similar geographical places and social activities in each country, comparing cultural customs |
| Materials used for the activity | PowerPoint presentation made by students from each country, paintings |
| Activity steps | 1. Before C6 students received PowerPoints about 15 facts in the Czech Republic. <br> 2. They choose 10 of them. <br> 3. Students find pictures of similar places or traditions in their country. <br> 4. Students do presentations on C6 to other students. |
| Pictures |  |


| Results, gained <br> knowledge | Students have learned about similarities in their countries and partners’ <br> countries, got to know European culture more closely. <br> Learned skills: creativity, cooperation, presentation. |
| :--- | :--- |

## Activity No. 2

| Activity name | Exploration activity in glassmaking company Preciosa: "Sand and glass" |
| :--- | :--- |
| Activity date <br> For which subject <br> this activity is <br> recommended | May 15, 2023 |
| Design and technologies |  |
| Useful vocabulary | Pressed and blown glass, containers, wool fiberglass, to melt, a mixture of raw <br> materials |
| Learning aims | To learn about history and present production of crystal chandeliers in town <br> Kamenický Šenov |
| Materials used for <br> the activity | Visiting company, guided tour <br> Activity steps <br> Pictures <br> Students got acquainted with the entire process of manufacturing glass lamps. <br> From melting the glass mass to blowing, grinding, assembly. |
| Results, gained <br> knowledge | Learning about glass processing. Getting to know European culture. |

## Activity No. 3

| Activity name | Orientation game "Questing game" |
| :--- | :--- |
| Activity date | May 15,2023 |
| For which subject <br> this activity is <br> recommended | 1.Geography <br> 2.PE |
| Useful vocabulary | Rural, urban, go green, natural environment, natural surroundings, sustainable, <br> sustainability, to contaminate. |
| Learning aims | To get know town Kamenický Šenov and its important places. |
| Materials used for <br> the activity | A map of the town with marked places, cropped image of glass museum <br> building. |


| Activity steps | 1.Students split into small international groups. They have 1 hour to complete <br> the task. <br> 2.Each group gets a map of the town with marked places. <br> 3. Search all the places marked on the map and find the pieces of picture, take <br> them! <br> 4. After visiting all places, 12 pieces of the picture must collected, from which <br> a whole picture must be created. <br> 5. The place shown in the picture is the place to go for the reward. |
| :--- | :--- |
| Pictures |  |
| Results, gained |  |
| knowledge | Students increased their ability to orient themselves on the map and move <br> according to it, they built the cooperation and communication competences. |

## Activity No. 4

| Activity name | Outdoor workshop in National Park |
| :--- | :--- |
| Activity date | May 16, 2023 |
| For which subject <br> this activity is <br> recommended | 1.Geography <br> 2.Biology |
| Useful vocabulary | Threat, to endanger, fumes, smog, deforestation, logging, thrive, local wildlife, <br> native wildlife |
| Learning aims | Learn about the geological past of the national park area and find out how the <br> local nature deals with fires. |
| Materials used for <br> the activity | Prepared worksheets, suitable clothing and shoes for hiking tour <br> Hiking tour with a biology, big panorama pictures of the national park. <br> observing nature. |


| Activity steps | 1.Walk from the meeting point to Šauštejn ruins. <br> 2.Stops at interesting places with explanations about the geological past, current <br> methods of protection and the return of wild animals such as the wolf, lynx, bat, <br> black stork and others. <br> 3.A view from Šaštejn to the nearby rock massif, where the forest burned about <br> 15 years ago and observing the ability of the forest to self-renew with the right <br> plant diversity. <br> 4.Observation of different types of mosses and animal tracks in nature. |
| :--- | :--- |
| Pictures | The students got to know the history of the formation of the place, geological <br> processes, the ability of the forest/nature to recover after a fire without human <br> intervention, got to know the beauty of geological phenomena. Got to know the <br> diversity of European culture and nature. <br> Acquired skills: cooperation, communication, cognition, analysis. |
| Results, gained <br> knowledge |  |

## Activity No. 5

| Activity name | Workshop: Upcycling old CDs to piece of art |
| :--- | :--- |
| Activity date | May 17, 2023 |
| For which subject <br> this activity is <br> recommended | Art and Design |
| Useful vocabulary | To recycle, reuse |
| Learning aims | Reusing of old CDs and decorating them with beads and slides |
| Materials used for <br> the activity | Old CDs, beads, glass slides, glue |
| Activity steps | 1.Prepare the necessary material. Drill 2 holes opposite each other on the edge <br> of the CD. Insert the wire into one and make an eyelet for hanging and hang 1 <br> glass string or other decoration in the other. <br> 2. Make a plan on how to decorate the CD to create a mandala. <br> 3. Apply special glue to the CD and create a picture from the individual parts. <br> This job requires patience. <br> 4. Let the finished picture dry until the next day so that the individual parts do <br> not fall off. |


| Pictures |  |
| :---: | :---: |
| Results, gained knowledge | Students use their imagination and creativity to create a work of art, which they later present and explain the patterns created in the decor. Learned skills: creativity, cooperation, presentation. |

## Activity No. 6

| Activity name | Workshop: Upcycling old T-shirts |
| :--- | :--- |
| Activity date | May 17, 2023 |
| For which subject <br> this activity is <br> recommended | Art and Design |
| Useful vocabulary | To recycle, reuse, to preserve, disposal products, sustainable, sustainability |
| Learning aims | To make a bag from old T-shirt |$|$| Materials used for |
| :--- |
| the activity | Old cotton T-shirt, scissors, textile dyes, templates $|$| 1. Cut off the sleeves from the T-shirt close to the seam. |
| :--- |
| 2. Use scissors to deepen the neckline in the front and back. |
| 3. This will create bag handles on both sides, depending on the depth of the |
| neckline. |
| 4. Cut the lower parts of the T-shirt to a height of 10-20cm at a distance of 2 |
| cm. This will create strips that we tie two against each other, this will be the |
| bottom of the bag. |
| 5. Finally choose a template, attach it to the bag and spray it with a paint. |


| Pictures |  |
| :--- | :--- |
|  | Students learned to give new practical uses to old things. <br> Learned skills: creativity, cooperation. |
| Results, gained <br> knowledge |  |

## Activity No. 7

| Activity name | Geological workshop |
| :--- | :--- |
| Activity date | May 17, 2023 |
| Target group | Students 12-16 |
| For which subject <br> this activity is <br> recommended | 1.Biology <br> 2.Art and Design |
| Useful vocabulary | Natural resources, fossil fuels, natural resources, ecology, conservation <br> programme. |
| Learning aims | Get to know the geological structure of non-living nature, get to know minerals, <br> rocks and fossils and use them for creative activities. The workshop took place <br> at the world famous basalt formation called the Basalt Organ. |
| Materials used for <br> the activity | Paper cards of rocks and minerals prepared by other students, crucible, plaster, <br> paper, pencil, molding material, plaster, water, fossil casts |
| Activity steps | The groups disperse to individual stations where they perform prepared tasks. <br> Casts of fossils |
| 1. Pupils stamp a fossil into the modeling clay. <br> 2. Using another a piece of matter creates an edge around the imprinted fossil <br> so that the result looks like a bowl. <br> 3.Pour pre-mixed plaster with water (mix must have optimal density) to the <br> bowl. <br> 4. After drying carefully, peel off the plaster cast. |  |
|  | Determination of minerals and their use <br> 1. Pupils are given two sets of 14 cards. On the first set there is the name of a <br> mineral. On the second one it is described how this mineral is used. <br> 2. With the help of mobile phones match cards from both sets. |
| Creating a model of volcano from nature <br> 1.Collect various natural objects around the rock. <br> 2.Bring nature objects to one place and create a volcano model from them. <br> 3.Talk about volcanoes and describe their individual parts. |  |


|  | Drawing the shape of basalt columns <br> 1.Look closely at the few basalt columns on the rock. Observe how many edges <br> they have. <br> 2. Draw several different columns on the paper (some are four-sided, five-sided, <br> some six-sided). |
| :--- | :--- |
| Pictures | Both, students who prepared activities under the guidance of the biology <br> teacher, and students who participated in the workshop reminded themselves or <br> learned knowledge about inanimate nature in a creative and fun way. |
| Results |  |

## Activity No. 8

| Activity name | Soap workshop |
| :--- | :--- |
| Activity date | May 18,2023 |
| For which subject <br> this activity is <br> recommended | Design and technology <br> Chemistry |
| Useful vocabulary | Nature resources, natural environment, rich in natural resources, sustainable, <br> chemistry |
| Learning aims | Relaxing time making your own herbal soaps as a gift to bring home. |
| Materials used for <br> the activity | Pre-prepared soap blanks made from natural materials, wool fabric |
| Activity steps | 1.Take readymade soap cubes of different scents and compositions. Put in a <br> soap frame (or cookie cutter) and carefully cut out different shapes. <br> 2. Two types of techniques are used in making wool items - dry and wet felting. <br> These techniques differ in that in the dry technique the wool is processed with <br> a special needle - the more the wool is processed with the needle, the denser it <br> tightens and takes the desired shape. Creates spatial objects in the dry technique. <br> When working with wool in the wet technique, it is necessary to moisten the <br> wool with very warm soapy water and rub it until the wool hardens. The wet <br> felting technique is used to create various flat objects. <br> 3. Put the cut-out soaps in a box made of recycled paper. |


| Pictures |  |
| :--- | :--- |
| Results, gained <br> knowledge | Nice smelling and pleasant activity after half day hiking. Students learned how <br> to make souvenirs from natural materials found in our environment. |

## Part 1 - Environment Vocabulary: Key Definitions

environment - the natural world, as a whole or in a particular geographical area, especially as affected by human activity.
environmental - relating to the natural world and concerning the impact of human activity on its condition.
environmentalist - a person who chooses a lifestyle that is designed to minimise their impact on the natural environment and who campaigns for environmental issues.
environmentally-friendly - not harmful to the environment.
natural environment - the natural world as opposed to, for example, a working environment.
environmental hazard - a substance or an event which has the potential to threaten the surrounding natural environment.
environmental disaster - a catastrophic event affecting the environment due to human activity. conservation - the protection of plants, animals and natural resources, usually by planned human action. conservationist - a person who takes action to protect the environment from damage caused by humans. conservation programme - an organized plan to protect a specific natural area or aspect of the natural environment.
wildlife conservation - the protection of wildlife.
nature conservation - work that protects natural resources including wildlife, rivers, forests and other natural landscapes.
energy conservation - the effort made to use less energy.
natural selection - the differential survival and reproduction of individuals due to differences in phenotype.
natural surroundings - the natural environment or natural world encompasses all living and non-living things occurring naturally. The term is most often applied to Earth or some parts of Earth.

## Part 2 - Environment Vocabulary: the natural world - wildlife, plant life $\boldsymbol{\&}$ habitats

wildlife - animals that live in the wild in natural conditions. Birds, fish and insects are often included in the definition.
local wildlife - the wildlife to be found in a particular area.
native wildlife - wildlife that naturally lives in a particular area and is not there as a result of human intervention.
a creature - any living thing that can move independently.
fauna - the animals of a particular region or habitat.
flora - the plants of a particular region or habitat.
vegetation - the collective name for all the plants growing in a particular place or area.
species - a group of animals or plants that have similar characteristics and can reproduce together, a group of biological individuals who can interbreed.
salvia - is the largest genus of plants in the sage family Lamiaceae, with nearly 1000 species of shrubs, herbaceous perennials, and annuals.
camomile - is the common name for several daisy-like plants of the family Asteraceae. Two of the species, Matricaria chamomilla and Chamaemelum nobile, are commonly used to make herbal infusions for beverages.
parsley - is a bright green, biennial plant in temperate climates, or an annual herb in subtropical and tropical areas.
peppermint - is a hybrid species of mint, a cross between watermint and spearmint. Indigenous to Europe and the Middle East, the plant is now widely spread and cultivated in many regions of the world.
lavender - Lavandula (common name lavender) is a genus of 47 known species of flowering plants in the mint family, Lamiaceae. It is native to the Old World and is found in Cape Verde and the Canary Islands, and from Europe across to northern and eastern Africa, the Mediterranean, southwest Asia to India.
rosemary - commonly known as rosemary, is a shrub with fragrant, evergreen, needle-like leaves and white, pink, purple, or blue flowers, native to the Mediterranean region.
coriander - is an annual herb in the family Apiaceae. All parts of the plant are edible, but the fresh leaves and the dried seeds are the parts most traditionally used in cooking.
pine - Pine trees are evergreen, coniferous resinous trees (or, rarely, shrubs) growing 3-80 metres (10260 feet) tall, with the majority of species reaching $15-45 \mathrm{~m}$ tall. The smallest are Siberian dwarf pine and Potosi pinyon, and the tallest is an 81.8 m tall ponderosa pine located in southern Oregon's Rogue River-Siskiyou National Forest.
pine needles - the thin pointed leaf of a pine tree.
European spruce tree needles - the leaves are needle-like with blunt tips, $12-14 \mathrm{~mm}$ long, quadrangular in cross-section, and dark green on all four sides with inconspicuous stomatal lines.
fabrics - cloth or material for making clothes, covering furniture, etc.
linen fabrics - Linen is a flax-based textile that is predominantly used for homeware applications. While linen is similar to cotton, it is made from fibers derived from the stems of the flax plant instead of the bolls that grow around cotton seeds.
smell - the faculty or power of perceiving odours or scents by means of the organs in the nose.
touch - is one of the sensations processed by the somatosensory system.
feel - to perceive or examine by touch.To have a sensation of (something), other than by sight, hearing, taste, or smell.
guess - estimate or conclude (something) without sufficient information to be sure of being correct.
photosynthesis - the process in which light energy is converted to chemical energy in the form of sugars. In a process driven by light energy, glucose molecules (or other sugars) are constructed from water and carbon dioxide, and oxygen is released as a byproduct.
food chain - is a linear network of links in a food web starting from producer organisms (such as grass or algae which produce their own food via photosynthesis) and ending at an apex predator species (like grizzly bears or killer whales), detritivores (like earthworms or woodlice), or decomposer species (such as fungi or bacteria).
fertilizers - any material, organic or inorganic, natural or synthetic, which supplies one or more of the chemical elements required for the plant growth.
defoliation -the process of leaves falling off a plant, or of making this happen:
meristems - a type of tissue found in plants. It consists of undifferentiated cells (meristematic cells) capable of cell division.
hydroponics - the technique of growing plants using a water-based nutrient solution rather than soil, and can include an aggregate substrate, or growing media, such as vermiculite, coconut coir, or perlite.
sphagnum moss - is a genus of approximately 380 accepted species of mosses, commonly known as sphagnum moss, also bog moss and quacker moss.
competition - an interaction between organisms or species in which both require a resource that is in limited supply (such as food, water, or territory).
symbiosis - "living together", any type of a close and long-term biological interaction between two biological organisms of different species.
lichens - a complex life form that is a symbiotic partnership of two separate organisms, a fungus and an algae.
myoxidae - dormice are nocturnal animals found in Africa, Asia, and Europe.
algae - a group of predominantly aquatic, photosynthetic, and nucleus-bearing organisms that lack the true roots, stems, leaves, and specialized multicellular reproductive structures of plants.
evolution-living nature historical development.
endangered species - a species that is in serious danger of extinction.
threatened species - a species that is likely to become endangered in the near future.
rare species - an uncommon or scarce species.
protected species - species which it is forbidden to harm by law.
extinct species - a species of which there are no more alive.
ecosystem - all the living things in an environment and the complex relationship between each of them and that environment.
delicately balanced ecosystem - an ecosystem where the loss of a key species, or several significant species, can seriously affect it.
fragile ecosystem - an ecosystem that does not adapt easily to change and is easily destroyed by human or physical impact.
mother Nature - nature or weather considered as a force that controls all living things.
diverse - varied and very different from one another.
biodiversity - the variety of animal and plant life found in a particular place.
loss of biodiversity - when species become extinct in an area and there is no longer such a great variety of species.
ecology - the relationship between animals, plants, people and their environment in a particular area, or the study of this.
habitat - the natural home or environment of an animal, plant or other organism.
to inhabit - to live in a certain place.
natural surroundings - the habitat in which a species would naturally live.
to adapt - to change or adjust in response to new conditions.
to evolve - change or develop gradually.
evolution - the process by which living things slowly change and develop over a long period of time.
thrive - to grow and develop well or quickly.
marine - related to or found in the sea.
nocturnal - active at night.
migrate - to move from one region or habitat to another, usually when the season changes.
extinction - being completely destroyed so that it no longer exists.
dying out - to become increasingly less common, almost to the point of extinction.
ornithology - is a branch of zoology that concerns the study of birds.
passerine - relating to or denoting birds of a large order distinguished by having feet that are adapted for perching, including all songbirds.

## List of birds:

bee-hummingbird -a species of hummingbird,
goldcrest - a very small passerine bird.
mute swan - a species of swan and a member of the waterfowl family Anatidae.
African ostrich - the largest subspecies of S. camelus.
white wagtail - a small passerine bird in the family Motacillidae.
nightingale - a small passerine bird best known for its powerful and beautiful song.
woodlark - the only extant species in the lark genus Lullula.
blackbird - a species of true thrush. It is also called the Eurasian blackbird.
common crane - a large, stately bird and a medium-sized crane
wood pigeon - a large species in the dove and pigeon family
starling - small to medium-sized passerine birds in the family Sturnidae
swallow - a family of passerine songbirds found around the world on all continents.
marsh warbler - perching bird shares some characteristics, such as being fairly small, vocal, and insectivorous.
cuckoo - generally medium-sized, slender birds.

## Part 3 - Environment Vocabulary: The natural world - resources \& environment

 climate - the general weather conditions usually found in a particular place.climate change - a change in global or regional temperature patterns.
3R`s - reduce, reuse, recycle.
combat climate change - to stop or reverse the effects of climate change.
natural resources - materials or substances that exist in nature, such as coal, oil, and timber, and can be used by people.
rich in natural resources - having a lot of natural resources.
fossil fuels - a fuel, such as coal, oil and gas, that is formed in the earth from dead plants and animals. atmosphere - the layer of gasses surrounding the Earth or any other planet.
ozone layer - a layer of the colorless gas ozone that exists high above the Earth's surface and which prevents harmful ultraviolet light from the sun from reaching the Earth.
carbon dioxide - a gas formed when carbon is burned, or when people or animals breathe out.
carbon monoxide - a poisonous gas formed by the burning of carbon, especially in the form of car fuel.
greenhouse gas - a gas in the atmosphere, such as carbon dioxide, that absorbs radiation and gives off heat.
greenhouse effect - the gradual warming of the surface of the Earth due to greenhouse gasses being trapped in the atmosphere above the Earth.
geyser - a spring characterized by an intermittent discharge of water ejected turbulently and accompanied by steam.
lunar crater volcanic field - is a volcanic field mostly small volcanic cones with associated lava flows but also several maars, including one maar named Lunar Crater.
lava field - sometimes called a lava bed, is a large, mostly flat area of lava flows.
stalagmite - a type of rock formation that rises from the floor of a cave due to the accumulation of material deposited on the floor from ceiling drippings.
columnar basalt formations - is a columnar jointing of volcanic rocks exists in many places on Earth. Perhaps the most famous basalt lava flow in the world is the Giant's Causeway in Northern Ireland, in which the vertical joints form polygonal columns and give the impression of having been artificially constructed.
rhyolite mountains - in Iceland most of these places span a large area of land, displaying a combination of hot springs and an ultracolourful landform. These places have a stunning spectrum of geology and earth colours. The mountains and the colours are a product of a variety of geological factors ranging from the magma that flows underneath, the chemical combination of the lava flow when surfacing, the condition on the surface to the many hundreds or thousands of years they have been in existence.
geothermal heat - is the direct use of geothermal energy for some heating applications. originates from the heat retained within the Earth since the original formation of the planet, from radioactive decay of minerals, and from solar energy absorbed at the surface.

MidAtlantic ridge - is a mid-ocean ridge (a divergent or constructive plate boundary) located along the floor of the Atlantic Ocean, and part of the longest mountain range in the world.
glaciers - are large, thick masses of ice that form on land when fallen snow gets compressed into ice over many centuries.
peninsula - is a landform that extends from a mainland and is surrounded by water on most, but not all of its borders.
tectonics - are the processes that result in the structure and properties of the Earth's crust and its evolution through time.
conical volcano or volcano cone- is the hill-shaped landform that forms around a volcano. Volcanic cones can be steep or gently sloping depending on the type of eruption that form them.
electricity - is a type of energy that consists of the movement of electrons between two points when there is a potential difference between them, making it possible to generate what is known as an electric current.
hydropower - or hydroelectric power, is a renewable source of energy that generates power by using a dam or diversion structure to alter the natural flow of a river or other body of water.
geothermal pools - can be found on every continent, including Antarctica. A geothermal pool, also known as a hot lake, occurs when groundwater is geothermally heated by the earth's crust.
renewable energy - energy derived from natural sources that are replenished at a higher rate than they are consumed. Sunlight and wind, for example, are such sources that are constantly being replenished.

## Part 4 - Environment Vocabulary: Environmental issues

erosion - the gradual wearing-away of something by the natural forces of the wind, rain and water. coastal erosion - damage to the coastline caused mainly by waves.
soil erosion - removal of the upper layer of the soil, mainly by water or wind.
wind erosion - a process where soil or rocks are worn away by the wind.
deforestation - the cutting down or burning of all the trees in an area.
land clearance - the process of removing vegetation to create new areas of land suitable for farming.
pollution - damage to water, air or land by harmful substances and waste materials.
to pollute - to contaminate water, air or land with harmful substances and waste materials.
emissions - the production and discharge of something, especially gas.
carbon footprint - the amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual or organization.
global warming - a gradual increase in world temperatures caused by polluting gases, such as carbon dioxide, which are collecting in the air around the Earth and preventing heat from escaping into space.
to fight / to combat / to tackle global warming - take action to reverse the effects or promote the issue of global warming.
the effects of global warming - the environmental changes caused by global warming such as climate change.
disposable products - items that are intended to be thrown away after use, generally after just one or a few uses.
dumping ground - a place where things that are not wanted are left.
acid rain - rain rainfall made so acidic by atmospheric pollution caused by burning fossil fuels that it causes environmental harm, especially to forests and lakes.
to contaminate - to make something poisonous as a result of adding waste or chemicals.
degradation - the process in which the quality of something is damaged or destroyed.
depletion - the reduction in the number or quality of something.
fumes - strong, unpleasant and sometimes dangerous gas or smoke.
$\operatorname{smog}$ - a mixture of smoke, gasses, and chemicals, especially in cities, that makes the atmosphere difficult to breathe and harmful for health.
air quality - the extent to which the air is free of pollution.
poisonous - having chemical properties that can cause harm or kill.
toxic - poisonous.
threat - something or someone that is a risk or a danger.
to endanger - to expose something to harm or destruction.
poaching - the illegal hunting or capturing of wild animals.
drought - a long period when there is little or no rain.
flooding - when an area of land that is normally dry is covered with water.
flash floods - a sudden, local flood caused by very heavy rainfall.

## Part 5 - Environment Vocabulary: Protecting the environment

to protect - keep safe from harm, injury or damage.
to preserve - to keep something as it is.
wildlife preservation - the practice of protecting wild plant and animal species and their habitats.
to recycle - to collect waste materials and process them to create new materials and products that can be used again.
biodegradable - able to decompose naturally without harming or polluting the environment.
carbon-neutral - replacing the same amount of carbon dioxide as we produce through actions such as planting trees.
sustainable - involving methods that do not use up or destroy natural resources.
sustainability - the idea that we should meet our own needs in ways that do not damage the environment and that do not use resources that cannot be replaced.
renewable energy - energy from a source that is not depleted when used.
solar power - power obtained by harnessing the energy of the sun's rays.
energy-efficient - using only as much energy as is needed without any waste.
wind turbine - a tall structure with blades that are blown round by the wind and produce power to make electricity.
wind farm - a group of wind turbines.
clean energy - energy produced from renewable energy resources and which doesn't produce emissions that contribute to global warming.
organic farming - farming without the use of synthetic chemicals.
afforestation - the action of planting trees on an area of land in order to make a forest.
to go green - to choose an environmentally-friendly lifestyle.
safeguard - take action to protect something from harm or damage.

## Part 6 - Environment Vocabulary: Other useful words

urban - relating to, or characteristic of a town or city.
rural - in, relating to, or characteristic of the countryside rather than the town.
collaboration - the action of working with someone to produce something.
pressed glass - is a form of glass made by pressing molten glass into a mold using a plunger.
blown glass - is a glass forming technique that involves inflating molten glass into a bubble (or parison) with the aid of a blowpipe (or blow tube).

Annex 2 - Worksheet for the workshop "Smell, touch, feel, guess"

| No. | The picture of the herb, spice | Write the number of the herb, spice | Write the name of herb, spice |
| :---: | :---: | :---: | :---: |
| 1. |  |  | Salvia |
| 2. |  |  | Camomile |
| 3. |  |  | Parsley |
| 4. |  |  | Peppermint |
| 5. |  |  | Lavender |
| 6. |  |  | Rosemary |
| 7. |  |  | Pine needles and buds |
| 8. |  |  | European Silver spruce tree needles |
| 9. |  |  | Coriander |
| 10. |  |  | Coffee |

## Annex 3 - Cards for the game: Let's get to know the Latvian eco-system





Apse
Populus tremula
Aspen

Baltās vizbulītes
Anemone nemerosa L.
Wood anemone

Žubīte
Fringilla montifringilla

> Brambling




# Brūklene <br> Vaccinium vitis-idaea <br> Lingonberry 

Dižraibais dzenis
Dendrocopos major
Great spotted woodpecker

## Egle

Picea abies
Spruce


Lācis
Ursus arctos
Brown Bear






Dzilnītis
Sitta europaea
Eurasian nuthatch

Maijpuķītes
Convallaria majalis
Lily of the valley


Sarkanā mušmire
Amanita muscaria
Fly agaric

Maijvabole
Melolontha melolontha
Common cockchafer



Liepa
Tilia cordata Mill.
Small-leaved linden

> Vijolītes

Viola reichenbachiana
Viola

Zilās vizbulītes
Hepatica nobilis
Kidneywort

Ugunspuķe
Chamerion angustifolium
Fireweed

|  | Odze <br> Vipera berus Common adder |
| :---: | :---: |
|  | Susuris <br> Glis glis <br> Fat dormouse |
|  | Rudmiese <br> Lactarius deliciosus <br> Red pine mushroom |
|  | Sikspārnis <br> Nycticeius humeralis Evening bat |



Vāvere
Sciurus vulgaris
Red squirrel


Piepe
Fomes fomentarius
False tinder fungus

Svilpis
Pyrrhula pyrrhula
Eurasian bullfinch

Silpurene
Pulsatilla patens
Eastern pasqueflower
Zalā vārna
Coracias garrulus
European roller


Priede
Pinus sylvestris L.
Pine


Lielā zïlīte
Parus major
Great tit


Zeltgalvītis
Regulus regulus
Goldcrest



Cūcene
Lactarius turpis
Ugly Milk-cap


Kadiķis
Juniperus communis
Juniper


Eglu krustknābis
Loxia curvirostra
Red crossbill


## Ezis

Erinaceus europaeus
Hedgehog


Eglu mükenes kāpurs Lymantria monacha larvae

Black arches larvae


Jenotsuns
Nyctereutes procyonoides
Raccoon dog


Meža zemenes
Fragaria vesca
Wild strawberry

Meža balodis
Columba oenas
Stock dove

|  | Pelēkais zaķis <br> Lepus europaeus European hare |
| :---: | :---: |
|  | Pīlādzis <br> Sorbus aucuparia Rowan |
|  | Sesks <br> Mustela putorius European polecat |
|  | Virši Calluna vulgaris Common heather |



## Dzeguze

## Cuculus canorus

Common cuckoo


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