

### Lesson 2



# PLANET EARTH – UNIQUE PLACE TO LIVE, CLIMATE AS SUPPORTER OF LIFE

Lesson objective: To teach students about our planet, its' history, different climates and habitats

Terms: planet Earth, climate, weather, habitats

Materials required for the Eco workshops: shoe boxes, paper, cardbord, crayons or markers, different natural materials (for example: sea shells, rocks and pebbles, plants)



### 1. Discussion with an interactive task

5 min. 🕚



Learning To interest and acquaint pupils with the topic of the lesson.

To draw their attention to the lesson. objective:

### **ACTIVITIES**

**Teacher:** turns on the screen, asks questions and leads the discussion.

Pupils: answer the questions.

On the screen: animation of stars, Milky way and Earth from Space.

What do you know about our planet?

- Where is it in the Solar system?
- Why is the Sun important?
- Why do we call Earth the blue planet?

# 2. Interactive task

5 min. 🕚



Learning To acquaint pupils with the term "climate" and to ensure that the

objective: terms of "climate" and "weather" are distinguished.

### **ACTIVITIES**

**Teacher:** coordinates activity.

**Pupils:** listen to the information and arrange the statements in their respective columns.

#### Audio as an introduction to the game:

What is weather and what is climate? Weather is something short term that can change from day to day while climate is something recorded in a long period of time and cannot change easily.

#### Example

Climate: it often snows in this area during the winter.

Weather: it wasn't snowing this weekend but we can expect a snowstorm on Thursday.

**Interactive task:** Does the phrase describe climate or weather? Click the right answer!

Climate	Weather										
<ul> <li>It takes a long time to change</li> <li>It is usually warmer in Brazil than in my home town</li> <li>Sweden is so cold during the winter that they built ice hotels as a tourist attraction</li> <li>In South Africa republic winters are hotter than summers</li> </ul>	<ul> <li>It can change in a few hours</li> <li>It's snowing, let's go outside and play</li> <li>This is the warmest day in Paris ever</li> <li>It's windy outside, so take a jacket</li> </ul>										

# 3. Information (Audio/text)

1 min. 🕚



Learning To provide information and enhance pupils' knowledge

concerning influences on climate. objective:

### **ACTIVITIES**

**Teacher:** coordinates activity. **Pupils:** listen to the information.

On the screen: animation showing the rotation of planet Earth.

Since the last ice age, the climate has not undergone major changes. The amount of light and warmth the Earth receives from the Sun affects the climate and living things and depends on many different things.

The Sun is not always equally active while the Earth can change both the distance and position, and thereby the amount of light and warmth changes.

# 4. Information (Audio/text)

1 min. (1)



Learning objective:

To acquaint pupils with the existence and role of the atmosphere.

### **ACTIVITIES**

**Teacher:** coordinates activity. Pupils: listen to the information.

On the screen: picture of the atmosphere from space, animation showing meteor shower.

Earth's climate is also affected by its air envelope called the atmosphere. It contains the oxygen we breathe and also has a lot of other roles.

If there was no atmosphere that retains heat, the temperature on Earth would be -18°C on average and the meteors would hit the Earth's surface.

This way the average air temperature on Earth is +14°C and the meteors mostly burn in the atmosphere. When the meteor enters the atmosphere, it makes a bright burning tail and it looks like a star has fallen. That is how we get the meteor shower.

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# 5. Information (Audio/text)

1 min. 🕚



Learning objective:

To inform pupils that life is what makes the Earth unique.

#### **ACTIVITIES**

**Teacher:** coordinates activity. **Pupils:** listen to the information.

On the screen: animation about life.

However, the most interesting thing about the Earth isn't the fact that it floats in space around the giant fireball, nor that it has clouds and the wind, not even that it's filled with molten rocks.

The most interesting things about it are not in the distance or in the deepness. It's right on the surface - life.

### 6. Interactive task

15 min. 🕚



Learning objective: To acquaintan students how short the existence of humanity is in

comparison to the Earth and other life forms.

### **ACTIVITIES**

**Teacher:** coordinates activity.

Pupils: watch and listen to the video and afterwards go trough the clock by themselves to investigate the past of the planet.

**Narration:** We will now watch a video about our planet Earth. In this video, you can see what would happen if the entire life on the Earth - from its inception to the present day took place in 24 hours or one day. Earth was formed at midnight.

Too fast? There is a simple reason for this: if the whole life on our planet was reduced to 24 hours, people and everything you know would appear at the last minute. In the next period, explore the history of our planet for yourself!

Interactive task: Go through time in your own pace or choose a specific time and find out what happened at that point of time!

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# 7. Interactive task

5 min. 🕚



Learning To establish understanding of the main events of time on the

objective: Earth.

### **ACTIVITIES**

**Teacher:** coordinates activity.

**Pupils:** arrange the timeline in the correct order and explain the choice.

On the screen: timeline.

Arrange the timeline in the correct order!

- 1. Formation of the moon
- 2. Formation of the atmosphere
- 3. First plants
- 4. Dinosaurs
- 5. Humans

5 2 3 1 4

### 8. Interactive task

20 min. 🕚



Learning objective: To acquaint with some of the various habitats, their names and

local climate of those habitats.

To improve the previously acquired knowledge about them.

### **ACTIVITIES**

**Teacher:** coordinates activity.

Pupils: work in groups.

On the screen: picture of habitat, its' name and different animals around the picture.

The habitats: rainforest, tundra, desert, savannah, ocean, taiga, temperate forest, freshwater, grassland.

Work in groups and choose the animals that would live in the particular habitat (each group has one or several habitats)!

Drag the right animals to center of the picture. Afterwards briefly present your groups' habitat to the others (information is given when all the correct animals are in the picture)!

#### 9. Discussion 2 min.

Learning To make correlation between various habitats and the pupils' life

objective: experiences.

### **ACTIVITIES**

**Teacher:** coordinates activity. Pupils: express their opinions.

On the screen: questions.

What habitat have you seen so far?

What habitat do we live in?

### 10. Interactive task - test

5 min. 🕚



Learning objective:

To test the pupils' knowledge and understanding.

### **ACTIVITIES**

**Teacher:** coordinates acitivity, gives feedback to pupils.

Pupils: carry out a test individually or in a group.

#### On the screen:

- 1. Chose the statement that describes climate!
  - It is snowing in Riga.
  - We expect it to be sunny in Vilnius this summer.
  - Northern countries have colder winters than the Mediterranean ones.
    - It is raining in Zagreb.
- 2. Which animals can you see together in the same habitat?
  - Lion, bear, frog.
  - Crab, camel, reindeer.
  - Fox, zebra, polar bear.
  - Fox, wolf, deer.
- 3. Humans have appeared on Earth...
  - Relatively recently.
  - At the same time as dinosaurs.
  - At the same time as plants.
  - Before the creation of the Moon occurred.

### 11. Eco workshop

25-45 min. 🕚



Learning objective: To get to know the principle of a green lifestyle – give things a

second life.

To develop co-operation skills by working in a group.

#### **ACTIVITIES**

**Teacher:** coordinates activity.

**Pupils:** divide into groups and work accordingly to the given example.

Collect different shells, crab shells, pebbles, etc. and try to make some of the aquatic environments (dioramas) using recycled materials, for example, drawing and cutting fish out of cardboard or making them out of clay!

### 12. Interactive task

10 min. 🕚



Learning objective: To improve the pupils' knowledge and understanding of habitats.

climate and weather.

To make an introduction and connection to the next lesson.

### **ACTIVITIES**

**Teacher:** coordinates activity.

Pupils: work in groups or individually by dragging the weather condition to the

appropriate habitat following the directions.

On the screen: directions and habitats.

If the snow is common in that habitat, drag the snowing cloud to the picture.

If there are long periods without the rain, drag the sun.

If the area has enough rain, drag the raining cloud.

Habitats: rainforest, desert, savannah, grassland, tundra, taiga.

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