Questions and tasks on stations of the climate journey



The real-life and personal examples of the Climate World Journey offer a good opportunity to introduce children to individual aspects of the complex topics of climate change, causes and effects.

In addition, we have compiled work tasks for some of the journey stops.

Our main concern, as always, is to support you in the best possible way in your so important work with the children. Therefore, we are happy to add more ideas and tasks to the collection that you have successfully tested or adapt existing ones according to your. recommendations Send us your comments at

kindermeilen@klimabuendnis.org.
(please include the details under which we may publish them)

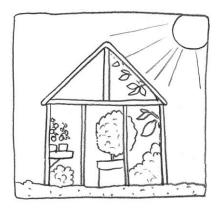
Tip Read out individual stations of the climate journey as part of a read-aloud breakfast break.

This way, questions that arise can be discussed directly and tasks can be worked on in the following lesson...

Questions and tasks on the Antarctic climate travel station

For the younger ones

- Have you already discovered Antarctica on the world map? It is located so far south that it can often only be discovered on a globe. Antarctica is a large island where the southernmost point of the Earth is located, the so-called South Pole.
- Why are there no cities in Antarctica? What do the people who live in the settlements do?
- What is the favourite food of penguins and why is it less?



For the older ones

- When was Antarctica discovered? Who was the first person to reach the South Pole in 1911?
 - In 1820, Antarctica was sighted from a ship for the first time. On 14 December 1911, Roald Amundsen and a Norwegian expedition were the first to reach the South Pole. He and all his companions died due to the severe cold.
- What is pack ice and how does it form? Why does the sea freeze over when there is no wind?

 Pack ice consists of densely arranged ice floes. These floes push over and under each other with the ocean current. The ice then becomes very dense.
- Why do the penguin parents no longer find their way back to the breeding grounds of their young?

Task: Why is it so cold in Antarctica, even though this large island lies in the south? You can find the answer by pointing a beam of light at the equator on a globe. How much light reaches the top or the bottom?

Tip The consequences of the greenhouse effect can be seen clearly in Antarctica. In the accompanying booklet you can read how the children can investigate the greenhouse effect in an experiment (accompanying booklet module 32 and worksheet page 55).

Questions and tasks on the Africa climate travel station

For the younger ones

- Why is there no water in the village where Esiankiki lives?
- Where does the water for people and animals come from? Who fetches the water and how is it transported? Try to carry a container of water on your head.
- Why don't all the children in Esiankiki's village go to school?
- Why do the Maasai use thorn bushes instead of barbed wire to protect their village against wild animals? Do you know any thorn hedges in your neighbourhood and have you ever tried to slip through them?



For the older ones

- Why can't the Maasai grow vegetables and fruit?
- With whom was there a dispute over the scarce water? What were the consequences? How could the situation be improved and water brought to the village?

 A well would provide the village of Esiankiki with drinking water. It would save the inhabitants a lot of effort and time. When building a well, one has to be careful not to drill too deep. Otherwise, it can happen that too much groundwater is extracted from the soil and soon there is no more water in the well.
- Why do people in Africa build their houses out of clay?
 What happens when it rains?
 Clay is a cheap raw material, of which there is a lot in Africa. Clay regulates the temperature in the house. It is cooler during the day and warmer at night than outside. Every time after the rainy season, the big repair begins, because the rain masses wear away some of the clay.

Task: Fill water and some soil into a shallow bowl and put it in the sun for two days. What happens? Think about how you could build a small house out of clay

Tip In Kenya, houses are built of clay. Earth paints can also be made from clay. You can read about how to do this in the accompanying booklet (page 39, module 58).

Questions and tasks for the climate travel station South East Asia

For the younger ones

- What do people in Southeast Asia do with wood from the rainforests and why?
- What is recycled paper made of? What can be made from it?

 Recycled paper is made from paper, cardboard or carton that has already been used. No new wood has to be cleared for this. It takes less energy and water to make recycled paper than it does to make new paper. Recycled paper can be used for writing and painting. But it can also be used to make hygiene paper, for example kitchen paper, toilet paper or handkerchiefs.
- What can you use instead of tissues to blow your nose?

Task: Can you make your own paper and what do you need? How long did it take you to make one sheet of paper? (We explain how you can make your own paper in the information sheet 'Eco-Fair Procurement').

For the older ones

- What is cellulose and what is it made from?
- Why are rainforests called the 'green lungs of our earth'? Why is it so important to preserve the rainforests?

 The plants of the rainforest produce oxygen. In addition, the wood stores CO2. The rainforests help to cool the earth's atmosphere. This is because there is a huge cloud cover above the warm, humid jungle that blocks the sun's rays.
- What is the reason why large pieces of forest are not only cut off, but also burned down??

Task: Read the ingredients of margarine, chocolate bars or ice cream and find out if they contain palm oil. Also check your bathroom to see if shampoo, shower gel and other cosmetics contain palm oil.



Tip In Southeast Asia, a lot of rainforest is cleared to grow oil palms. Oil palms are used to produce palm oil. The accompanying booklet explains which products contain palm oil (accompanying booklet page 31, modules 51).

Climate World Travel Station Australia: Where the Fire Devil Dances

For the younger ones

- What are the school doing to prevent heat in Australia?
- What happens to the forest when it doesn't rain for a long time?
 Why is open fire banned in many parts of Australia?
- Why were cars not allowed to be washed at Kyle's in Australia?

Task: How long does it take you to fill a bucket with 10 litres of water? How many buckets do you need to fill a whole bathtub?



For the older ones

- How is climate change affecting Australia? Is there a connection between high heat and drought?

 Climate change is causing the temperature in Australia to rise, and at the same time there is less rainfall.
- How much water was allowed to be used per person per day in Australia and what is the water consumption per person in Germany?

Task: Find out how many litres of water you use for showering? How could you reduce your water consumption? Where can you save the most water?

Tip Every day we consume a lot of energy. In an energy diary, the children can find out what they need energy for. You can read about how to do this in the accompanying booklet (page 34). They can also fill in the energy checklist (worksheet module 34, page 57).



Climate World Travel Station Netherlands, Floatings Settlements

For the younger ones

- Do you know where the Netherlands got its name?
- Have you seen reports about floods on TV? What happens to houses during floods?
- A dike is a wall of earth built up to protect against floods and storm surges. Have you ever stood on a dike and if so, where? On a river or by the sea?

Task: Build a dike in the sandbox around a lower lying area and flood the higher lying area around the dike. Can your dike withstand the water pressure?

What does a dike like this have to look like to withstand the pressure of the water?

For the older ones

- Why are people from other cities and countries also interested in the floating settlements?

 The rise in sea level due to climate change threatens many cities in coastal regions (search on a world map). There may also be floating settlements there in the future
- Do you know what a dike is and what it is used for? What does the term polder mean?

 A dike is a wall of earth that is built up to protect against flooding and storm surges. On the North Sea coast in particular, dikes can also be used to reclaim new land and are then referred to as diking the tidal flats. Depending on the region, the areas created by dyke construction in the past are called koog, polder or groden. Today, new land reclamation has taken a back seat because it causes many environmental problems. In the future, the Dutch want to work more with the water and less against it.

Tip In the Netherlands, many people ride bicycles because everything is flat. How do the children like to travel? With the building blocks 2 and 3 in the booklet, they can think about the advantages and disadvantages of different means of transport (booklet pages 44 and 45).

Climate World Travel Station Europe: Ski and sledge well

For the younger ones

- What are the names of the highest mountains in the world? How high do you think they are?
- When was the last time you have you been in the snow?
- Why is there less snow due to climate change?

Task: Have you ever taken a closer look at a snowflake? What happens to snow when you squeeze it tightly? Use the "snow" from your freezer



For the older ones

- Imagine you meet someone who has never seen snow. How would you explain it to him or her?
- When it stops snowing in winter, this also has an impact on our lakes and rivers. Why?

 A large part of the water in our lakes and rivers comes from the mountains. This is so-called melt water, i.e. snow that melts in spring and then flows down into the valley via streams. Without the meltwater, the waters may shrink considerably, or one day even dry up completely!
- What are glaciers? Where can you find the largest glaciers in the world?

 Glaciers are huge masses of ice that form in areas where it is so cold all year round that the snow that has fallen in winter does not completely thaw. This causes more and more snow to pile up, which is then pressed into ice by the growing pressure from above. The three largest glaciers in the world are located in Antarctica, Norway and Chile.

Task: Go to your freezer at home and look at the ice crystals under the magnifying glass. Can you draw them?

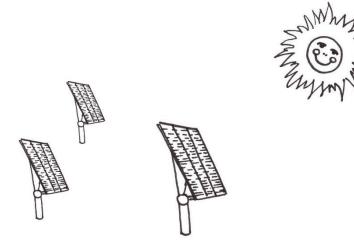
Tip Illustrate melting ice in a playful way: Accompanying booklet p. 42, break games "River crossing", variant melting ice floes

Questions and tasks for the Oceania climate travel station

For the younger ones

- How many oceans are there in the world? Which is the largest?
- What will happen to the many (smaller) islands if the sea level rises due to climate change?
- Why is it so easy to generate energy with solar cells in the South Pacific?

Task: Look at Oceania on the globe. Can you discover Tahiti? Can you count all the islands?



For the older ones

- Why is it such a big problem when the soil of oceanic islands becomes saline?

 The islands of Oceania are very far away from all the major land masses on earth. If they can no longer grow their own food because of the salinized soil, they have to
 - their own food because of the salinized soil, they have to import it. This is not only expensive, but also harmful to the environment, as transport by ship or plane produces greenhouse gases.
- Apart from solar energy, there are other forms of socalled "renewable energy". What are they and why are they called that? Electricity can also be generated from wind or water power. These are called renewable energies because, unlike oil or coal, the sun, wind or water always produces new energy.

Task: Oceania is a continent that consists only of islands. How many are there? How many people live there? Use a (children's) atlas or the internet.

Tip: Where does our energy come from and how can it be made more climate-friendly? Accompanying booklet p. 53, worksheet "Yesterday, today, tomorrow", module 30 and p. 56, worksheet "Introducing renewables", module 33

Questions and tasks for the climate travel station South America III

For the younger ones

How do you get from Pepe's Village to the city



- Why are the new lamps so much better than the old ones?
- What did the children have to do to get a lamp?
- Why is it so bad that there is so much rubbish in the river?

Task: Try not to use electricity for a whole day - can you do it? What is particularly difficult?



For the older ones

- How many countries are there in South America? What languages are spoken there?
- 13 countries. Spanish, Portuguese, French, Guaraní, as well as various indigenous languages such as the Chibcha languages.
- Why does the sun always rise at 6 a.m. and set at 6 p.m. for Pepe? How is it with us, and why? It's because Peru, where Pepe lives, is so close to the equator. This means that there are practically no seasons, because the sunlight is the same all year round. Here in the northern hemisphere, we get much less sunshine in winter than in summer because the globe is tilted and turns away from the sun in winter. In Australia, it's the other way round, which is why the seasons are reversed there.
- Have you ever experienced a power cut? What would it be like if you had no electricity at home?

Task: Accompany your parents shopping and try not to buy any packaging. Do you succeed? Or why is it so difficult?

Tip: Does your institution already have an exchange shelf? For more information, see the booklet on page 39, module 58. Where is plastic hiding in the school bag and the kindergarten bag? Ideas on this can be found in the booklet on page 40, module 38. Recipes for homemade modelling clay, glue and paint can be found in our handout on climate-friendly procurement.