

The Baltic Sea Project within the UNESCO ASP network

Baltic Sea WebQuiz 2021: questions and answers

10-13 years old students: 5 questions, 30 minutes



REPUBLIC OF ESTONIA
MINISTRY OF EDUCATION
AND RESEARCH



The Baltic Sea Project

1. The phytoplankton that you see on this satellite image grows massively when the Baltic Sea water is warm, the weather is sunny and calm and there is a lot of phosphorus in the water. This process is called eutrophication. Which toxic organisms grow during this process?

- a) molluscs
- b) cyanobacteria**
- c) zooplankton



Photo: processed by ESA, contains modified Copernicus Sentinel data (2019), CC BY-SA 3.0 IGO
Resource: https://www.esa.int/ESA_Multimedia/Images/2019/12/Baltic_blooms

2. Homes that use energy supplied from fossil fuels are responsible for significant emissions of carbon dioxide (CO₂). The energy keeps homes warm and bright and is used for appliances such as air conditioners. However, new buildings today consume half of the energy compared to the 1980s thanks to different smart solutions. For example, one solution to use less energy is to cover a building with plants. Why?

- a) plants increase the temperature of buildings in the summer
- b) plants keep buildings cool**
- c) plants convert carbon dioxide into oxygen

Photosynthesis (answer c) is a partially right answer, because more important are the processes of evapotranspiration, during which the heat from the air is used to evaporate water emitted by plants.



Photo: Wikimedia Commons, Steven Lek, CC BY-SA 4.0, [link](#)

Resources: <https://www.sciencedirect.com/science/article/abs/pii/S0306261916313824>

<https://www.lse.ac.uk/granthaminstitute/explainers/why-are-household-energy-efficiency-measures-important-for-tackling-climate-change/>

3. Many bird species migrate long distances, but some migrate only short distances and some do not migrate at all. Which of the following species common to Europe doesn't migrate?

a) **Western capercaillie (*Tetrao urogallus*)**

b) Black stork (*Ciconia nigra*)

c) White-tailed eagle (*Haliaeetus albicilla*)

d) European greenfinch (*Chloris chloris*)



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Resource: <https://animalia.bio/western-capercaillie>

4. Climate change today and in the future will force millions of people to leave their homes. The most affected regions in the world are Sub-Saharan Africa, South Asia and Latin America. What are the reasons for climate migration? You can pick more than one answer.

a) Rising sea level

b) Decreasing crop productivity

c) Shortage of water

d) Low quality education

Resource: <https://www.worldbank.org/en/news/infographic/2018/03/19/groundswell---preparing-for-internal-climate-migration>

5. The United Nations agreed on the Sustainable Development Agenda 2030 Goals in 2016. Which of the following goals are most relevant to the protection of the Baltic Sea?

a) FALSE



c) FALSE



b) TRUE



Resource:

https://fi.wikipedia.org/wiki/Kest%C3%A4v%C3%A4n_kehityksen_tavoitteet#/media/Tiedosto:Sustainable_Development_Goals.png

Baltic Sea WebQuiz 2021

Organizer: [Tartu Nature House](#) in Estonia, represented by Maria Ivanova.

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Web design and management: [Walk & Learn](#), represented by Marko Peterson.

Collaboration partners regarding quiz questions:

[NGO Mondo](#) in Estonia, represented by Diana Tamm, Meelis Niine, Kärt Leppik.

[Vaibla Ringing Station](#) in Estonia, represented by Mari Remm.

[University of Tartu Estonian Marine Institute](#), represented by PhD Jonne Kotta.

[Lithuanian Centre of Non-formal Youth Education](#), represented by Gretė Vaičaitytė.

[The Baltic Sea Project](#) network coordination in Finland, represented by Aira Undén-Selander, Mika Jokiahho, Jüssi Tomberg.

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