

The danger of global melting

An iceberg the size of Luxembourg has broken off from a glacier in Antarctica after being rammed by another giant iceberg in an event that could affect ocean circulation patterns. The iceberg broke off earlier this month from the Mertz Glacier's floating tongue of ice that sticks out into the Southern Ocean. The Mertz glacier iceberg is among the largest recorded for several years. The collision has since halved the size of the tongue. This hasn't been directly linked to climate change but it is related to the natural processes occurring on the ice sheet.

In recent years, the escalating number of massive icebergs breaking free from the continent has raised concerns that temperatures are steadily warming in the Antarctic region.

This happening could affect global ocean circulation. The area is an important zone for the creation of dense, salty water that is a key driver of global ocean circulation. This is produced in part through the rapid production of sea ice that is continually blown to the west. Removal of this tongue of floating ice would reduce the size of that area of open water, which would slow down the rate of salinity input into the ocean. Oceans act like a giant flywheel for the planet's climate by shifting heat around the globe via myriad currents above and below the surface.

As there are only a few areas in the world where this occurs, a slowing of the process would mean less oxygen supplied into the deep currents that feed the oceans. There may be regions of the world's oceans that lose oxygen, and then of course most of the life there will die.

Apart from that the melting of land ice it is already raising sea levels. In some fairly likely scenarios, oceans would rise by meters worldwide with devastating results. A sea level rise of just one metre would displace tens of millions of people in Bangladesh alone.

1. Comprehension exercises (2 points)

1.a. According to the text (0.5 points)

- a. the collision was caused by the climate change.
- b. the Mertz Glacier is the size of Luxembourg.
- c. **two icebergs hit each other.**

1.b. According to the text (0.5 points)

- a. **the collision has an influence on ocean circulation.**
- b. the rate of salinity input into the ocean may dramatically increase.
- c. we will die if oceans lose oxygen.

1.c. The production of sea ice is related to the production of salty water.

(Answer 'True' or 'False' AND write the sentence supporting this idea) (0.5 points)

- TRUE - The area is an important zone for the creation of dense, salty water that is a key driver of global ocean circulation. This is produced in part through the rapid production of sea ice that is continually blown to the west.

1.d. The rise of sea levels can make a lot of people change their home place as in Bangladesh.

(Answer 'True' or 'False' AND write the sentence supporting this idea) (0.5 points)

- TRUE - A sea level rise of just one metre would displace tens of millions of people in Bangladesh alone.

2. Do the following grammar exercises according to the instructions given (2 points)

2.a. Complete the second sentence so that it has a similar meaning to the first one, using 'despite' (0.5 points)

- he is our friend although he is impolite.

- he is our friend **despite being unpolite.**

2.b. Turn the two sentences into a sentence of purpose. (0.5 points)

- I have come early. The boss has to meet me.

- **I have come early so that the boss meets me.**

2.c. Complete the second sentence so that it has a similar meaning to the first one, using the auxiliary an expression with 'such' (0.5 points)

- It is not necessary to criticise him. He is a very good person.

- **He is such a good person that it is not necessary to criticise him.**

2.d. Rewrite the sentence using the appropriate preposition with the following adjective (0.5 points)

- **She is responsible for organizing the courses.**

3. Identify ONLY FOUR words from their definitions (1 point)

- hit or pushed something with force. (**rammed**)

- the act of taking something or someone away from somewhere, or off something. (**removal**)

- proportion, the amount or number of times something happens or changes in a particular period. (**rate**)

- increase, ascension. (**rise**)

- moving or changing from one position or direction to another, especially slightly. (**shifting**)

- separated, divided into two or more parts or groups (2 words). (**broken off**)

4. Write a summary of the text of about 30 – 45 words using your own words (2 points)

5. Write a composition of about 100 – 150 words on ONLY ONE of the following topics (3 points)

5.a. Describe how global melting could affect our lives.

5.b. The importance of employment.