

Name: _____

Date: _____

Grade 6 Reading Comprehension Worksheet

THE FROZEN OCEAN



Read the passage. Then answer the questions.

Covering an area of about 5,427,000 square miles, the Arctic Ocean is about the size of Russia, and yet the smallest and shallowest of the world's five major oceanic divisions. It's also one of the least explored, primarily because ice partly covers it throughout the year. It's surrounded by the land masses of Eurasia, North America, Greenland and several islands, while an underwater ridge divides it into two basins, which are further subdivided by ridges. The Arctic Ocean's surface temperature and salinity varies seasonally. Salt lowers the freezing temperature of seawater to -2°C . Despite this, when the atmospheric temperature drops in the Arctic, a thick layer of seawater begins to freeze. What makes the oceans 'ecology so intriguing is the amount of hidden life within - not just in its depths but dispersed across every level of the water column. One of the most important aspects of its rich biodiversity is the presence of micro-algae called phytoplankton, which form an essential component of the food chain. These single-celled plants not only provide nourishment to many marine animals, but also help to regulate the amount of tiny ice needles start to form, creating a salt-free solution called 'frail ice'. As the temperature continues to fall, the frail ice thickens and traps pockets of salty water in its layers. In the summer, the ice melts and the surface cover can be reduced to half of what it was. Thrives during this time, when the sun is out day and night, but struggles to survive in the dark days of winter. Climate change is blamed for the increasing loss of sea ice throughout the Arctic Ocean, as well as the melting of the Greenland ice sheet.

Answer each question.

1. How much area does the Arctic Ocean cover?
2. Why the Arctic Ocean is the least explored?
3. What is the Arctic Ocean's surface temperature?
4. What is the most important aspect of its biodiversity?
5. What is the 'frail ice'?
6. What happens in summer in the Arctic Ocean?