

Name: _____

VANISHING ICE

In “Trapped in Ice” (p. 8), you learned that climate change is causing sea ice in the Arctic to disappear and that the Arctic is warming faster than the rest of the world. The maps below show the amount of ice in the Arctic Ocean in September 1986 and September 2019. Use the maps and the information in the article to answer the questions that follow.

ICE IN DECLINE

Floating ice covers parts of the Arctic Ocean year-round. The area covered by ice grows larger in the winter and smaller in the summer. Over the past 30 years, as climate change has warmed the region, the area of ice remaining at the end of the summer has shrunk by about 50 percent.

KEY

- Ice
- Liquid Water



SEPTEMBER 1986



SEPTEMBER 2019

JIM MCMAHAN/MAPMAN®

ANALYZE IT

1. Which areas in the Arctic have lost the most sea ice?
2. During what month was the data collected? Why do you think scientists use this month to determine how the amount of sea ice has changed over the years?
3. Where do you think scientists plan to place the Polarstern to freeze it in the ice? Explain your reasoning.
4. Do you think climate change has affected how ships can travel through the Arctic Ocean? If so, how?
5. The article states that Arctic ice has decreased by 75 percent in volume since the 1980s, while the area of ice has shrunk by 50 percent. Do you feel that the map captures that drastic decrease? How else could the data be represented?