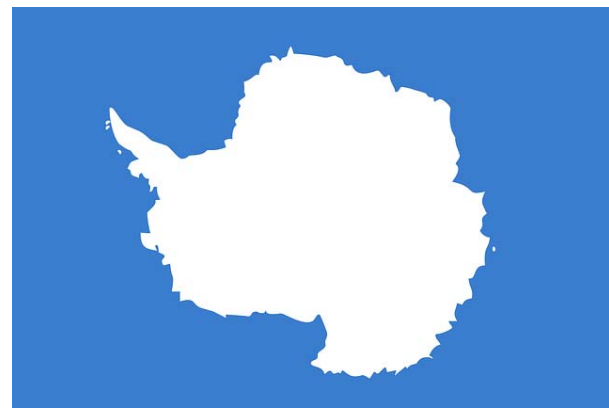


Name _____



Frozen Wonders

The Southern Ocean, also known as the Antarctic Ocean, surrounds the continent of Antarctica and extends from the coast of Antarctica to the 60° south latitude line. It is the smallest and youngest of the world's oceans, officially recognized as a distinct ocean by the International Hydrographic Organization in 2000.

Despite being the smallest ocean, the Southern Ocean is incredibly deep, with an average depth of about 3,270 meters (10,730 feet). Its deepest point, the South Sandwich Trench, plunges to depths of over 7,200 meters (23,600 feet) below sea level.

One of the major features of the Southern Ocean is the presence of vast ice shelves and glaciers along its coastlines. These ice formations are part of the Antarctic ice sheet, which contains about 90% of the world's ice and is the largest single mass of ice on Earth.

The climate of the Southern Ocean is predominantly polar, with extremely cold temperatures and high winds. The region experiences long, dark winters and short, cool summers. Temperatures can drop well below freezing, especially in the interior of Antarctica.

Surface temperatures in the Southern Ocean typically range from around -2°C (28°F) to 10°C (50°F) during the summer months, but can plummet to much lower temperatures in the winter. The presence of sea ice, which forms during the winter months, further influences temperatures and climate patterns in the region.

Weather in the Southern Ocean is characterized by strong winds, frequent storms, and heavy precipitation, mostly in the form of snow. These weather conditions can make travel and exploration challenging in the region.

Despite its harsh environment, the Southern Ocean is home to a variety of marine life, including whales, seals, penguins, and a wide range of fish and invertebrates. Many species have adapted to the cold temperatures and icy conditions of the Antarctic waters.

Human impact on the Southern Ocean is relatively limited compared to other oceans, primarily due to its remote location and harsh climate. However, increasing tourism, fishing, and scientific research activities in the region are raising concerns about potential environmental impacts.

Name _____

Frozen Wonders

Multiple Choice Questions

1. What surrounds the continent of Antarctica?

- A) The Arctic Ocean
- B) The Southern Ocean
- C) The Pacific Ocean
- D) The Indian Ocean

2. What is one major feature of the Southern Ocean?

- A) Coral reefs
- B) Underwater volcanoes
- C) Mid-ocean ridges
- D) Ice shelves and glaciers

3. What type of climate predominates in the Southern Ocean?

- A) Polar
- B) Tropical
- C) Mediterranean
- D) Desert

4. What is a characteristic of weather in the Southern Ocean?

- A) High temperatures year-round
- B) Calm winds
- C) Frequent storms
- D) Little to no precipitation

5. What is a concern regarding human impact on the Southern Ocean?

- A) Lack of tourism
- B) Overfishing
- C) Low scientific research activity
- D) Minimal environmental impact