

Name _____
Notes: Topic 6B Glaciers and Oceanography

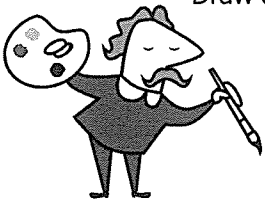
Glaciers (Section 7.1 in text)



A. How do glaciers form?

B. How do glaciers move?

C. ♦ What causes a glacier to retreat?



Draw a picture of how glaciers move.

D. Describe the two main types of glaciers.

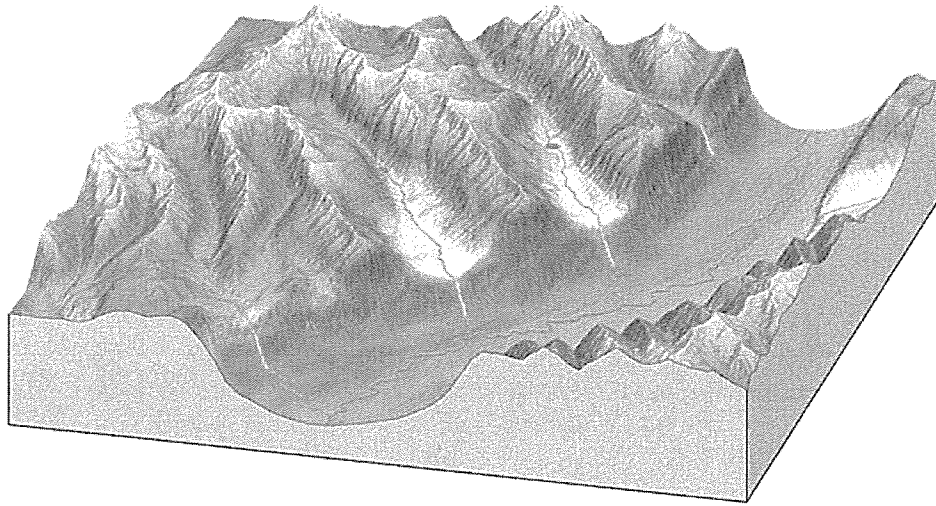
Mountain or valley: _____

Continental or ice sheets: _____

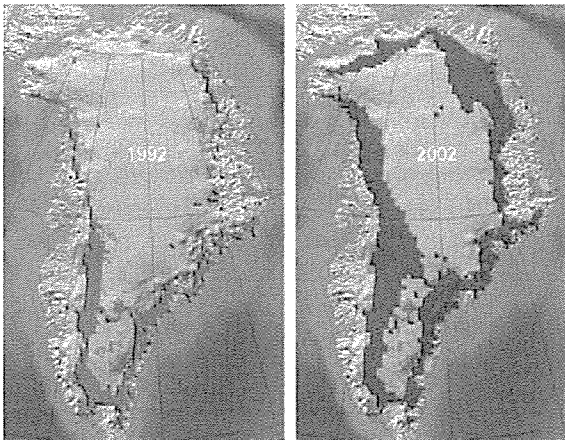
Name _____

Notes: Topic 6B Glaciers and Oceanography

D. Features of Glaciers: On the diagram below, label as many features as possible (on page 193 in text).



E. Global warming and the greenhouse effect are important environmental concerns. How are glaciers a part of these issues? What role do they "play"? (hint: there are many "answers" so think about it)



Seasonal surface melt extent on the Greenland Ice Sheet has been observed by satellite since 1979 and shows an increasing trend. The melt zone, where summer warmth turns snow and ice around the edges of the ice sheet into slush and ponds of meltwater, has been expanding inland and to record high elevations in recent years (source: Arctic Impacts of Arctic Warming, Cambridge Press, 2004).

Name _____

Notes: Topic 6B Glaciers and Oceanography

Oceanography

(definition) _____

A. Oceans

1. How much of the Earth's surface is covered by oceans? _____
2. Draw and **label** the profile (topography) of the ocean floor (page 402 in text).

B. Ocean Circulation (Section 16.1 in text)

Types of Circulation:

1. Surface Currents – _____

- What causes surface ocean currents? _____
-
-

2. Gyres - _____

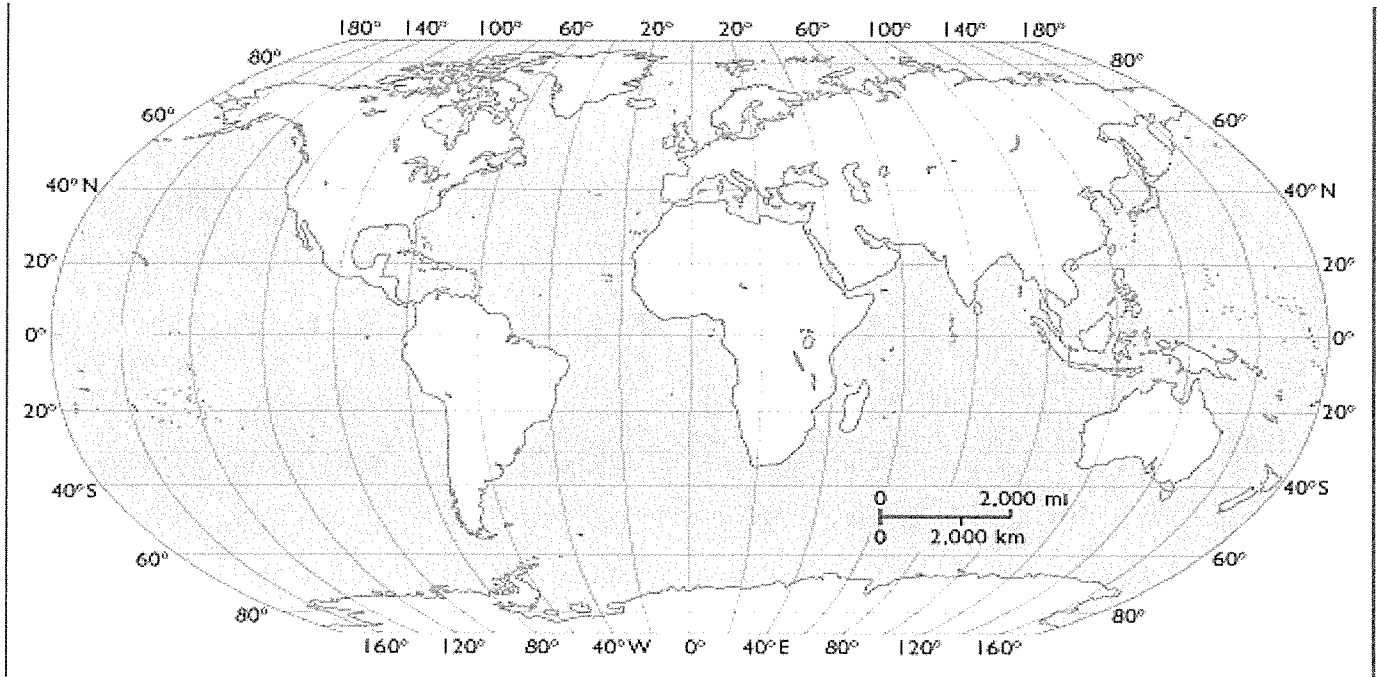
3. Deep-Ocean Circulation – _____

- Why does ocean water circulate beneath the surface? _____
-
-

Name _____

Notes: Topic 6B Glaciers and Oceanography

➡ Look at your E.S.R.T. pg 4 and recognize the different types of currents and then draw them on this map. Use a warm color for the warm currents and a cool color for the cool currents. The map on page 449 of your text will be helpful in labeling the gyres.



Questions:

1. How do surface ocean currents affect climates of certain regions? (be specific)

2. Describe what a tsunami is and how they are formed?

3. How can an increase in sea water density be caused?

Name _____

Notes: Topic 6B Glaciers and Oceanography

C. Coastline

1. The action of waves and currents move sediment and change the shoreline considerably over time.

2. Long-shore transport (drift) – _____

Describe how do long-shore currents move sediments? _____

B. Depositional shoreline features

1. Sand bars- _____

2. Barrier Islands - _____

3. Sand spits - _____

⇒ Jetties and groins are man-made features to reduce beach erosion.