Continental Ice Sheets

Slide 1
The Antarctic Ice Sheet is the largest mass of ice on Earth. It holds more than 60% of all freshwater on Earth, although it is all frozen. If the Antarctic Ice Sheet melted, global sea levels would rise about 61 meters. Ice enters the sheet through precipitation as snow, which is then compacted to form firn and then glacial ice. The ice then flows toward the coast, where it eventually breaks apart to form icebergs that float in the sea.

Slide 2
Greenland is an island country within the kingdom of Denmark and is located in the northern hemisphere between the Arctic and Atlantic Oceans. Nearly 80% of its surface is covered by the Greenland Ice Sheet, a large continental ice sheet glacier. The Greenland Ice Sheet is the second largest mass of ice on Earth. It is 2 to 3 kilometers thick and is nearly 2,400 kilometers long. Ice flows from the interior of the island toward the coastlines, where it also then breaks up to form icebergs.

Slide 3
The Laurentide Ice Sheet covered much of Canada and the northern US about 20,000 years ago. By 10,000 years ago, it had begun to retreat and melt away as the Earth underwent a slight warming period. The meltwater left behind filled basins that had been scooped out by the glacier, forming the present-day Great Lakes of North America. The Laurentide Ice Sheet is no longer in existence.