Name

Earth's Frozen Oceans

PART A: Sea Ice & Ocean Currents

1: What happened when you added salt water to the containers of fresh water? Why?

2: In your own words, summarize how sea ice influences ocean circulation.

Earthlabs: Cryosphere – Lab 2 http://serc.carleton.edu/eslabs/cryosphere/lab2.html

PART B: Sea Ice Thickness



1: What happened to the snow in the months of July and August? How did this affect the thickness of the sea ice? Explain.

2: Explain why the tops of the sea ice and snow are below **0** cm from July through December. Hint: Think about what the **0** mark on the y-axis represents.

Earthlabs: Cryosphere – Lab 2 http://serc.carleton.edu/eslabs/cryosphere/lab2.html



3: How does the age of Arctic sea ice in February 2008 compare to the 1985-2000 average? What do you think this means?

Earthlabs: Cryosphere – Lab 2 http://serc.carleton.edu/eslabs/cryosphere/lab2.html

PART C: Arctic Sea Ice Extent

1: Describe your plot. How does sea ice extent change over the course of a year? Explain.

2: Do you think you would see exactly the same pattern in the data if you chose a different year? Explain.

3: Describe your plot. How does sea ice extent change over the course of 5 years? How does this plot compare to your 1-year plot? Explain.