Name _____   Date _____

1. Sea ice is frozen ocean water, which freezes at a temperature of about ⁻1.8° Celsius. What is this temperature in Fahrenheit? (Use the formula: C * 9 / 5 + 32 = F).

2. Oil and gas are produced out of reservoirs that lay 10,000 to 15,000 feet deep below the surface. What is this range in kilometers?

3. The annual mean thickness of the ice cover declined from a peak of 3.71 m in 1980 to a minimum of 2.46 m in 2000. What is the percent decrease in the annual mean thickness of the ice cover?

4. Due to global warming, over a 20-year period, many birds have extended the northern margins of their ranges by an average of about 12 miles. Assuming global warming continues at the same rate, by how many miles will they have extended their range in another 10 years?

5. Carbon dioxide (CO_2) concentrations in the atmosphere increased from approximately 280 parts per million (ppm) in pre-industrial times to 382 ppm in 2006. What is the percent increase in carbon dioxide?

6. A Boeing 737 with 75% occupancy gets about 80 miles per gallon for each passenger. If there are 125 passengers on board, then how many times more fuel-efficient is the plane than a car that gets 25 miles per gallon?

7. The water level in the Lake Pontchartrain is usually 3 feet. A storm surge caused by a hurricane causes water to surge by 5 3/4 feet. What is the percent increase of the water level?

8. Replacing one regular light bulb with a compact fluorescent bulb will save 150 pounds of carbon dioxide per year. If you replace 25 regular light bulbs, then how many pounds of carbon dioxide will you save per year?

9. Deforestation is the logging or burning of trees in forested areas. Each year about 13 million hectares of the world's forests are lost due to deforestation. How many hectares will be lost in 9 years?

10. Glacier National Park had 150 glaciers more than a century ago. Today there are 35. What is the percent decrease in glaciers?