

**Global Warming and Climate Change – University of Calgary**  
**David H. Manz**  
**April 28, 2016**

**Assignment Number 2**

1. What is the difference between El Nino and La Nina? See web site #83.
2. How do El Nino and La Nina affect weather patterns in Canada?
3. Explain how the Milankovitch Cycles determine the timing of the ice ages.
4. Why does the concentration of CO<sub>2</sub> in the atmosphere vary with location on the planet and time of year?
5. How does CO<sub>2</sub> get into the oceans? How is CO<sub>2</sub> removed from oceans?
6. Which IPCC report (AR5 series) deals with the science of climate change? When was the final draft released? Name the other two reports in the AR5 series and state when the final drafts will be published.
7. Download the Summary for Policymakers (SPM) that deals with the science of climate change and answer the following questions.
  - a. What evidence exists that our climate system is changing? (point form of major indicators only – not the details)
  - b. How certain are the writers that anthropogenic forcing is the cause of global warming?
8. Discuss the importance of the use of satellites for the collection of data for use in global warming and climate change studies.

**Assignment is due May 5, 2016.**