

**ATMO 1300 Section 001**  
**In-class Worksheet #10**  
**Aug 7<sup>th</sup>, 2017**  
**Chapters 14, 15, and 16**

1. What are some of the controlling factors on climate? Name a handful of them (or all)

**Latitude, Elevation, Topography, Water, Prevailing winds, natural events, human activities**

2. How does dendrochronology (tree rings) illustrate the life of a tree? What do the tree rings allow us to decipher when looking at past climates?

**The widths of the rings are related to the amounts of precipitation and tree growth. The number of rings also tell us the number of years the tree has been around. The study of the rings allows us to decipher past precipitation and temperature patterns (droughts, heat waves, etc)**

3. What is some of the evidence of global warming?

**Global average temperature increase, glacial retreat, reduction of ice and snow coverage, rise in sea levels, expanding growing seasons**

4. What are some of the human (i.e. anthropogenic) impacts on climate change?

**Air pollution, changing land surface, global warming connections**

5. What is the urban heat island effect?

**Temperatures in cities are warmer than the surrounding rural areas. More surfaces absorb solar radiation and hold it in, industrial services adding heat, lack of plants and transpiration to cool atmosphere.**