1. What can we learn about present and past climate change from studying ice cores?

- We can learn about temperature trends
- Gas concentratsion from isotopes
- Volcanic activity
- Lots of info that gives us a better picture of Earth's climate over time

2. What is preserved in ice cores that reveals climate history?

- Air is trapped within ice bubbles
- Find traces of gasses which indicate certain changes : CO2, oxygen, sulfur, nitrogen
- Varying levels of dust and ash and temperature indicators

3. How and why is studying the tropics important to climate science?

- Tropics are closest to the sun and often dictate weather patterns across the world
- First to see effects of climate change, somewhat more concentrated in these areas
- Large amounts of biodiversity and complex ecosystems

4. What is the current status of glaciers and their distribution on Earth and how rapidly are they changing?

- We are losing glaciers around the world very quickly
- The rate as which glaciers are retreating is accelerating
- Changes seen in ice cores as well
- Andes and Kilimanjaro (tropics) likely first to feel effects

5. How can plant communities be used to build predictive models of climate change?

- Plants are the best indicators of climate change - from analyzing their nutrient compositions, growth rates, and reproduction areas
- Can compare these metrics to metrics of older plants to build models and predict future changes within the climate

6. What evidence do we have for recent climate change? Discuss at least 3 lines of evidence.

1. Retreating glaciers
2. Sea level rise and ocean acidification/contamination
3. Great, rapid changes within long-standing data from ice cores (temp, gas concentration, etc)