March 30, 2015

Warm-Up

Today you will need your notebook and pencil. Homework Page due Friday.

Please pick up your weekly homework page.

- Review: What is the difference between weather and climate?

What is the difference between weather and climate?

- Weather reflects short-term conditions of the atmosphere while climate is the average daily weather for an extended period of time at a certain location.

Climate Defined

- Definition:
  - Average weather of a particular area over a long period of time

- Application:
  - Describes annual temperature, precipitation and other variables

Normals

- Climatologists take climate data for at least the last 30 years to determine normals

  - Definition:
    - Standard values for a location, including rainfall, wind speed, and temperatures based on long-term records

Take Note…

- While climate describes the average weather conditions for a region, normals apply only to the specific place where the meteorological data were collected
- Most data is gathered at airports
- Your research question for this week is determining the normals for Raleigh-Durham (RDU Airport)

What Causes Climate to Vary?

- Climate around our country varies greatly

  - What is one reason why the climate in Minneapolis is different than in Dallas?
    - Latitude!
3 Major Climate Zones

- Between 23.5° S & N of equator
- Defined:
  - Moderate temperature

Tropics

- Defined:
  - Earth area that receives the most solar radiation, generally warm year round

Temperate Zones

- Between 23.5° and 66.5° S & N of equator
- Defined:
  - Moderate temperature

Polar Zones

- Extend from 66.5° S & N of equator to poles
- Defined:
  - Solar radiation strikes at a low angle, temperatures nearly always cold

7 Reasons for Variety of Climate

- There are many reasons for variety in climate across the Earth. Here are 7 to consider:
  1. **Latitude**
  2. **Topography**
  3. **Closeness of lakes and oceans**
  4. **Availability of moisture**
  5. **Global wind patterns**
  6. **Ocean currents**
  7. **Air masses**

Climate Variability Activity

- Attach into your notebook! Part of next notebook check
- Perform the activity with your table groups sharing data and the deck of cards