

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**



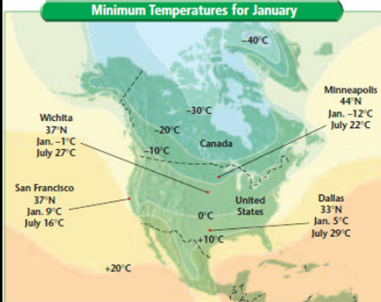
Take Note...



- 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)

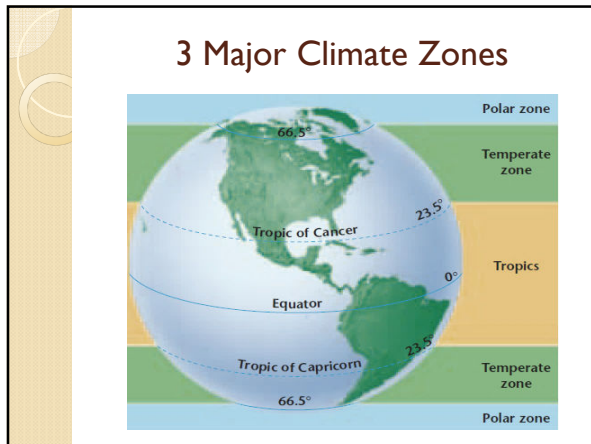
What Causes Climate to Vary?

- Climate around our country varies greatly



What is one reason why the climate in Minneapolis is different than in Dallas?

Latitude!



Tropics

- **Between 23.5° S & N of equator**
- 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

Homework

- 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