



# *Latitude and Longitude:*

*Finding Locations on  
Planet Earth.*



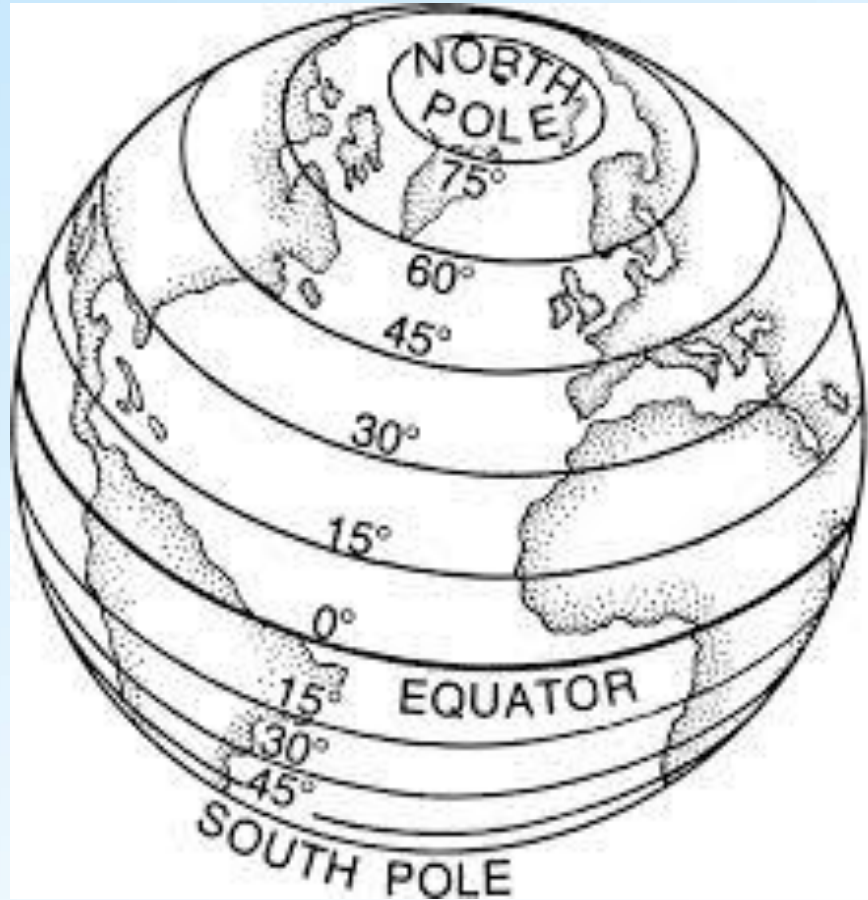
Latitude lines run east/west but they measure **north** or **south** of the equator ( $0^\circ$ ) splitting the earth into the Northern Hemisphere and Southern Hemisphere.





# Latitude

Lines of latitude are numbered from  $0^\circ$  at the equator to  $90^\circ$  N at the **North Pole**.



Lines of latitude are numbered from  $0^\circ$  at the equator to  $90^\circ$  S at the **South Pole**.

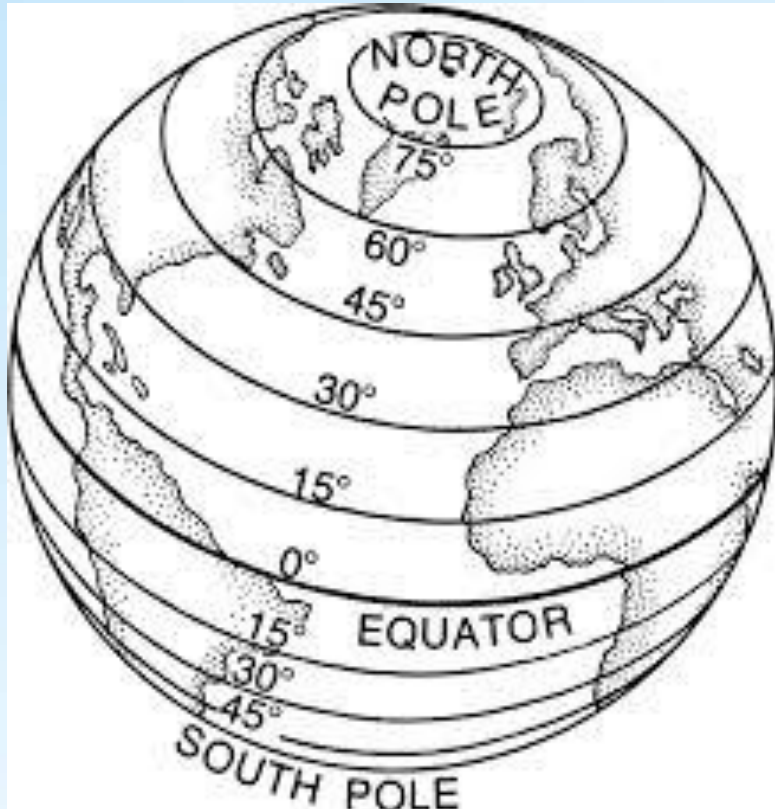


# Latitude

The North Pole is at  $90^{\circ}$  N

The equator is at  $0^{\circ}$  latitude. It is neither north nor south. It is at the center between north and south.

The South Pole is at  $90^{\circ}$  S

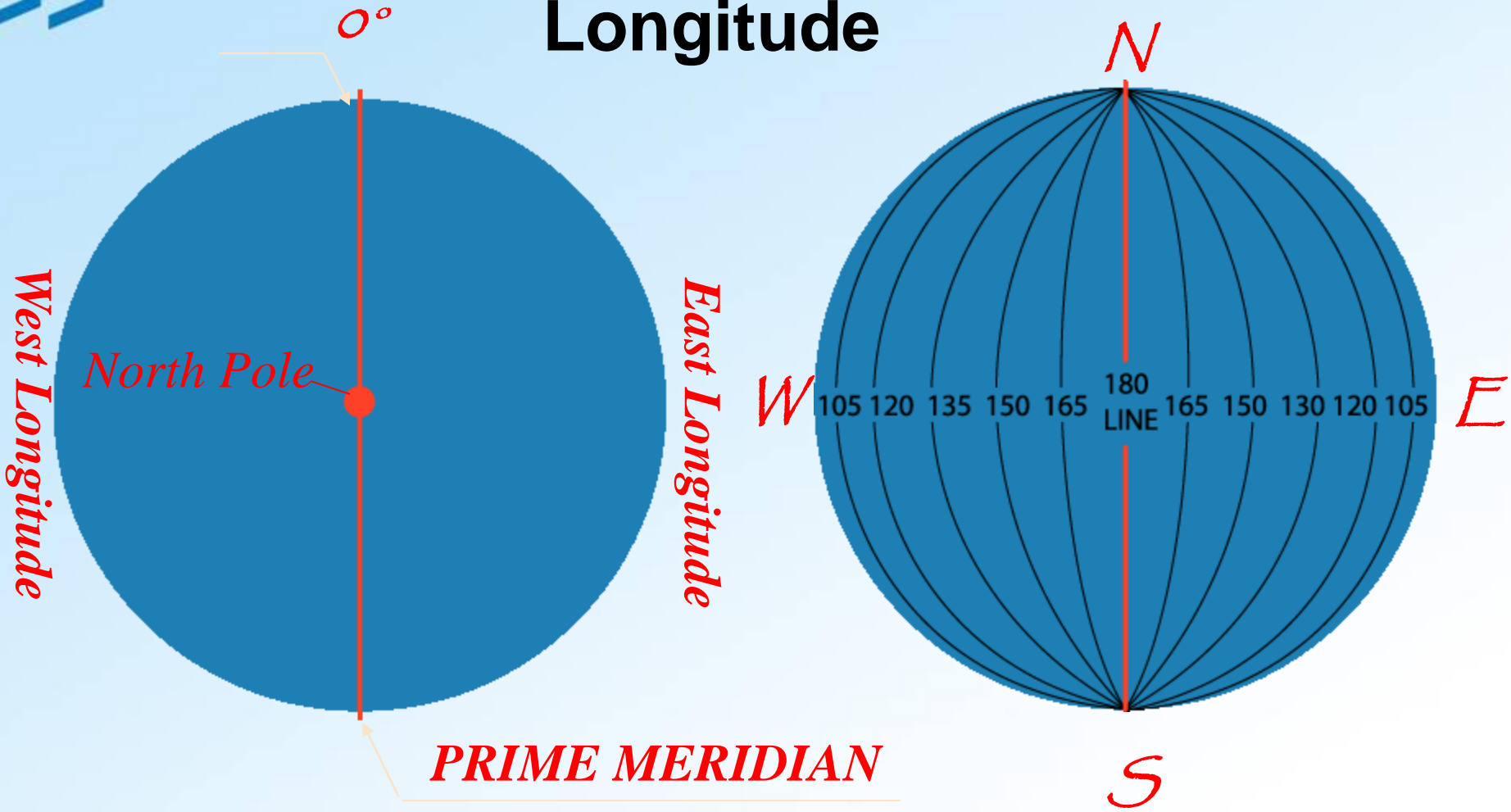


$45^{\circ}$  N is the  $45^{\circ}$  line of latitude north of the equator.

$45^{\circ}$  S is the  $45^{\circ}$  line of latitude south of the equator.



# Longitude



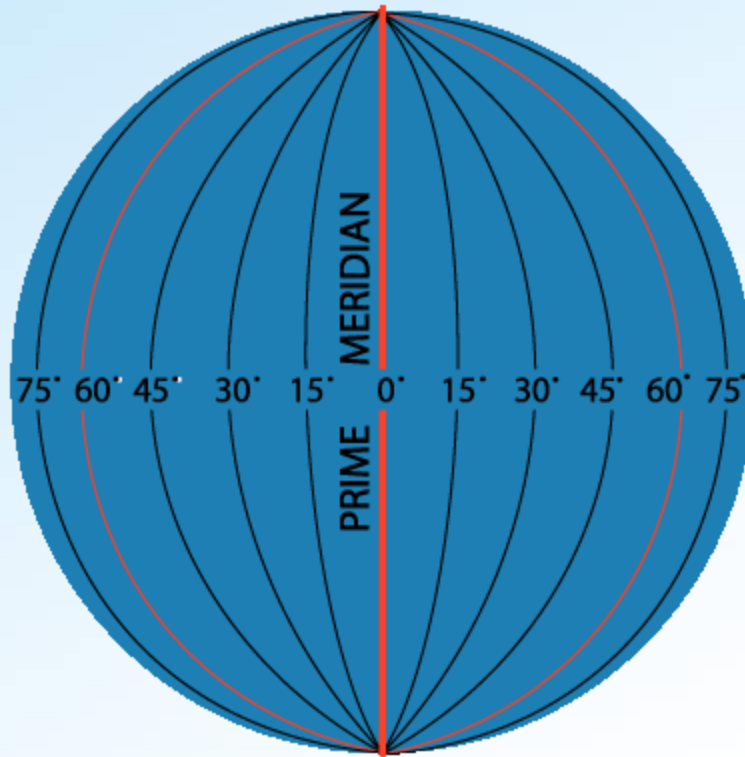
Lines of longitude are numbered **east** from the Prime Meridian and **west** from the Prime Meridian.

# >> Longitude

Lines of longitude begin at the **Prime Meridian**.



60° W is the 60° line of longitude west of the Prime Meridian.



*E*

60° E is the 60° line of longitude east of the Prime Meridian.

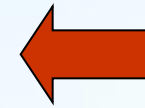
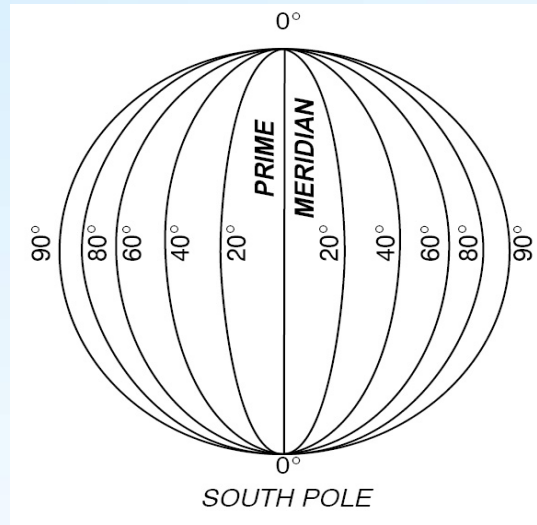
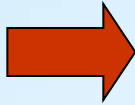
# Prime Meridian

The Prime Meridian ( $0^\circ$ ) splits the earth into the Western Hemisphere and Eastern Hemisphere.

*Prime Meridian*

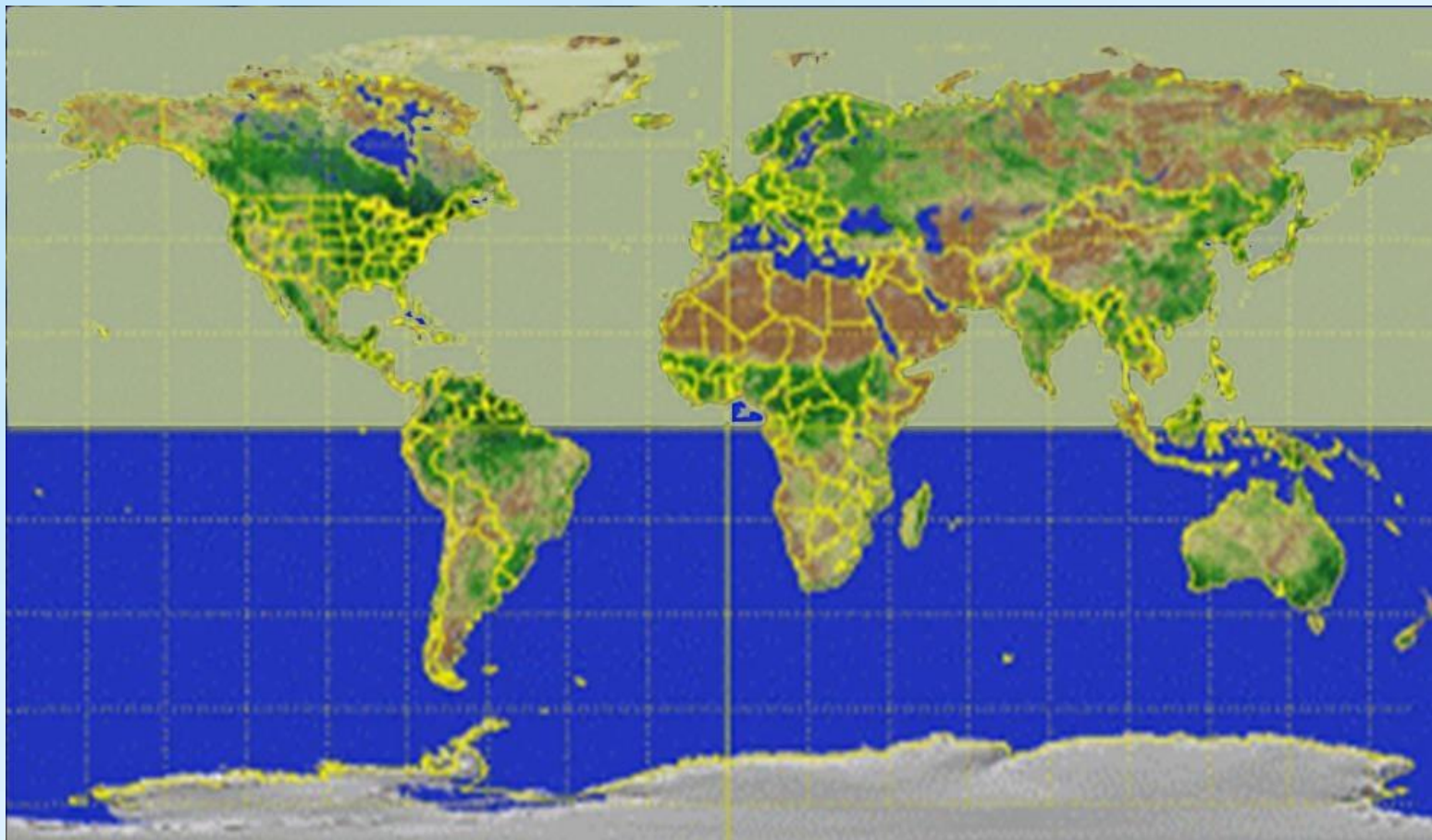


Western Hemisphere



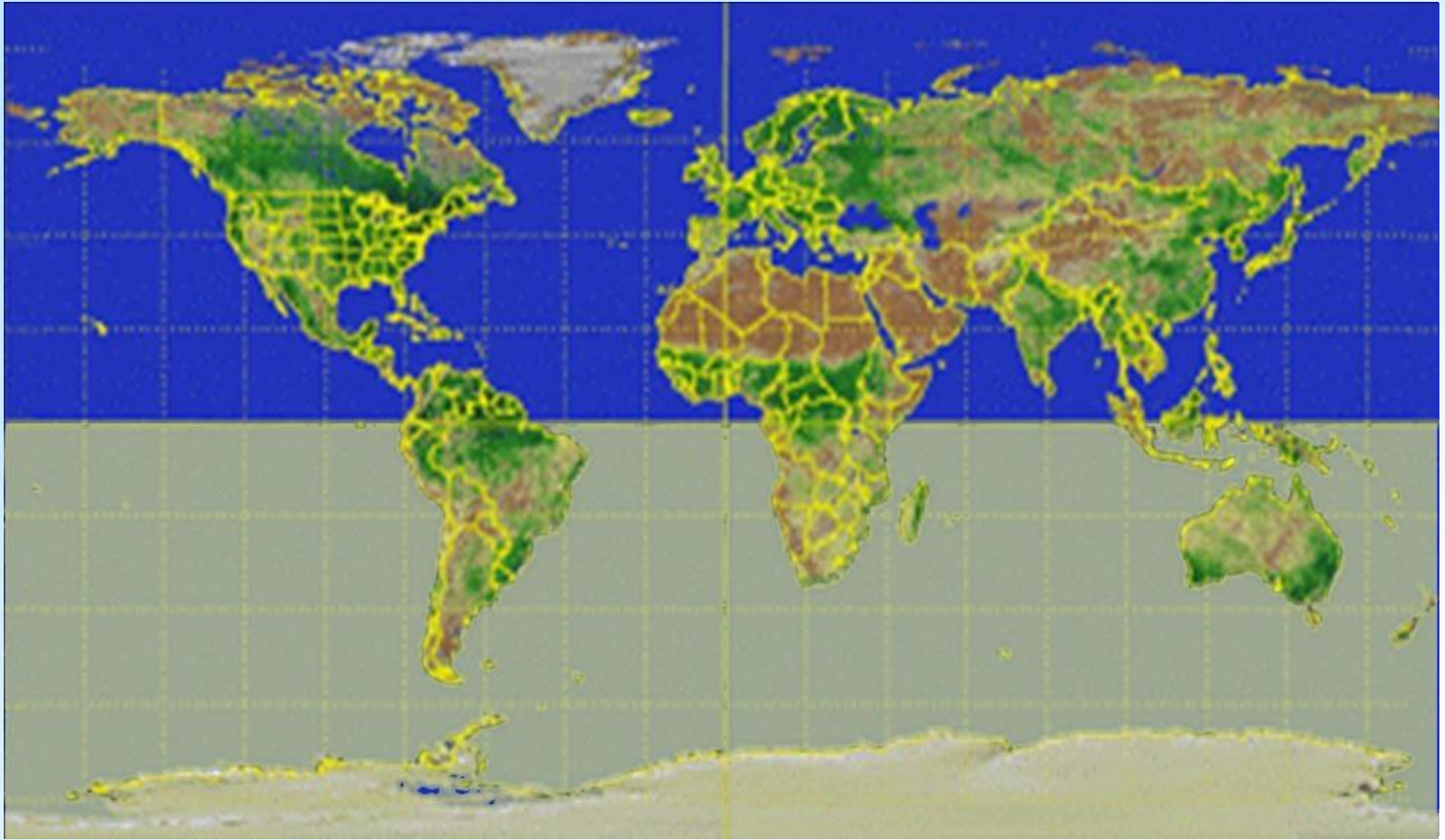
*Eastern Hemisphere*

Places located east of the Prime Meridian have an east longitude (E) address. Places located west of the Prime Meridian have a west longitude (W) address.

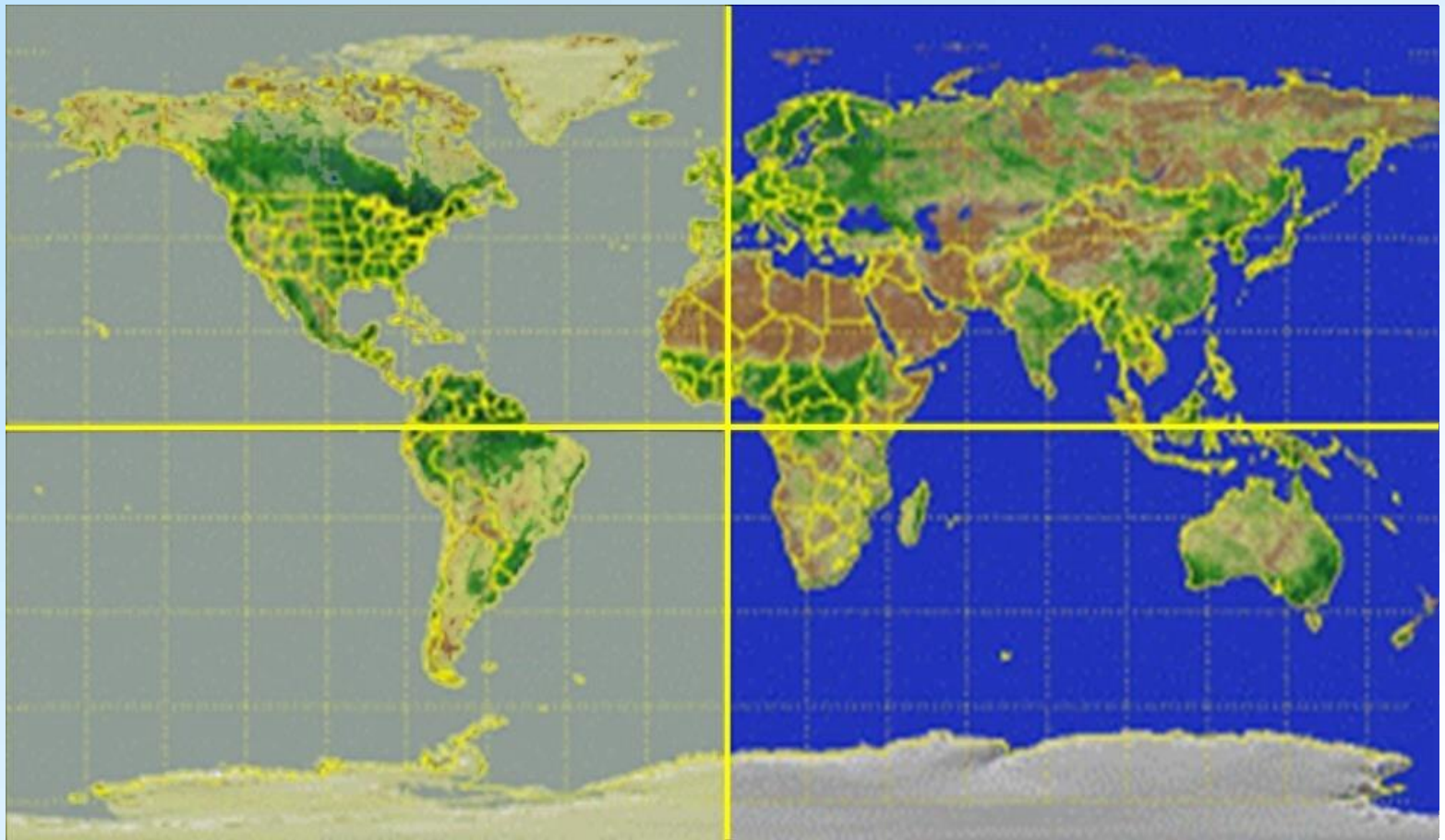


Any location north of the equator is a **NORTH LATITUDE**

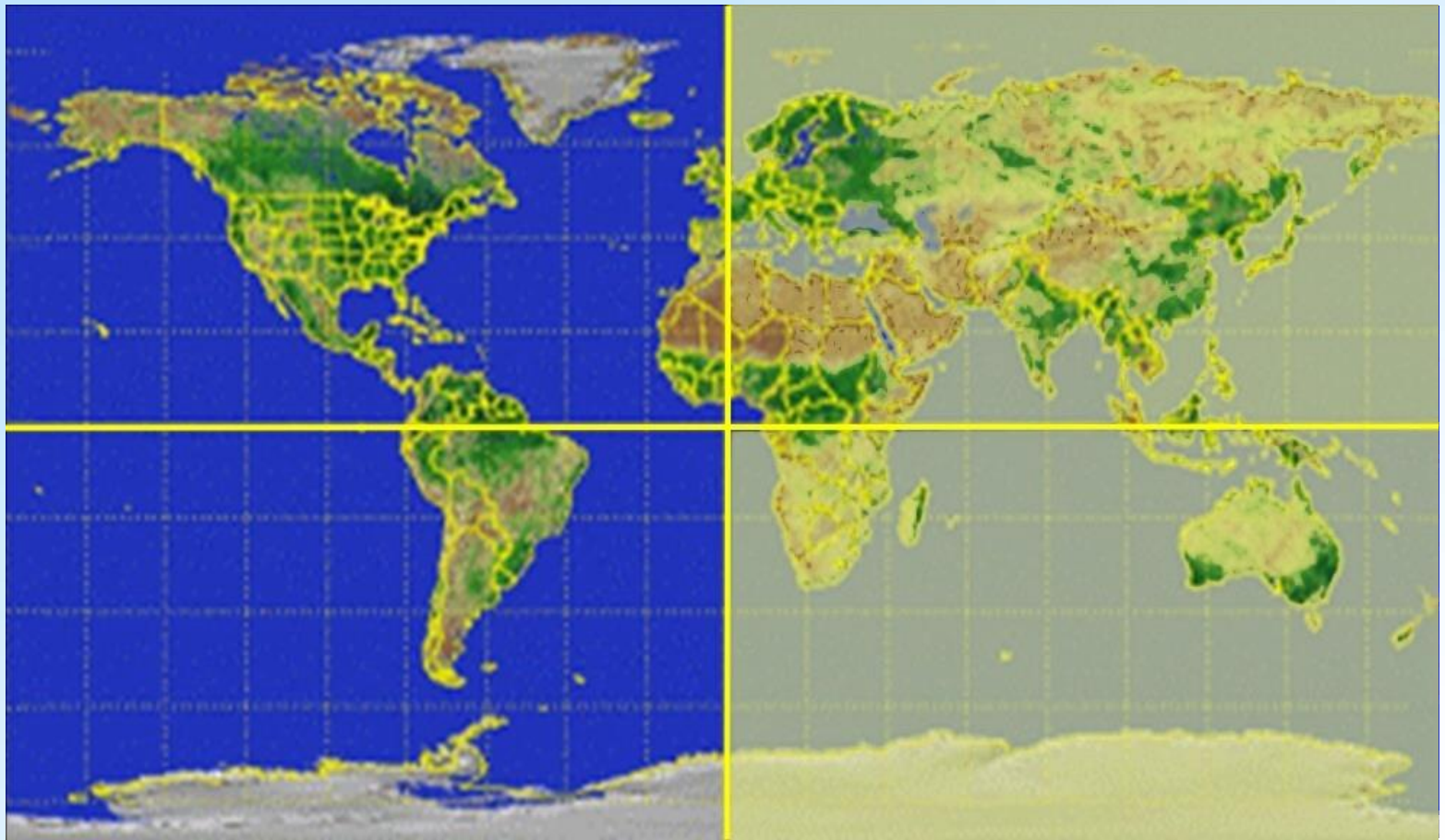




Any location south of the equator is a **SOUTH LATITUDE**



Any location west of the prime meridian is a **WEST LONGITUDE**

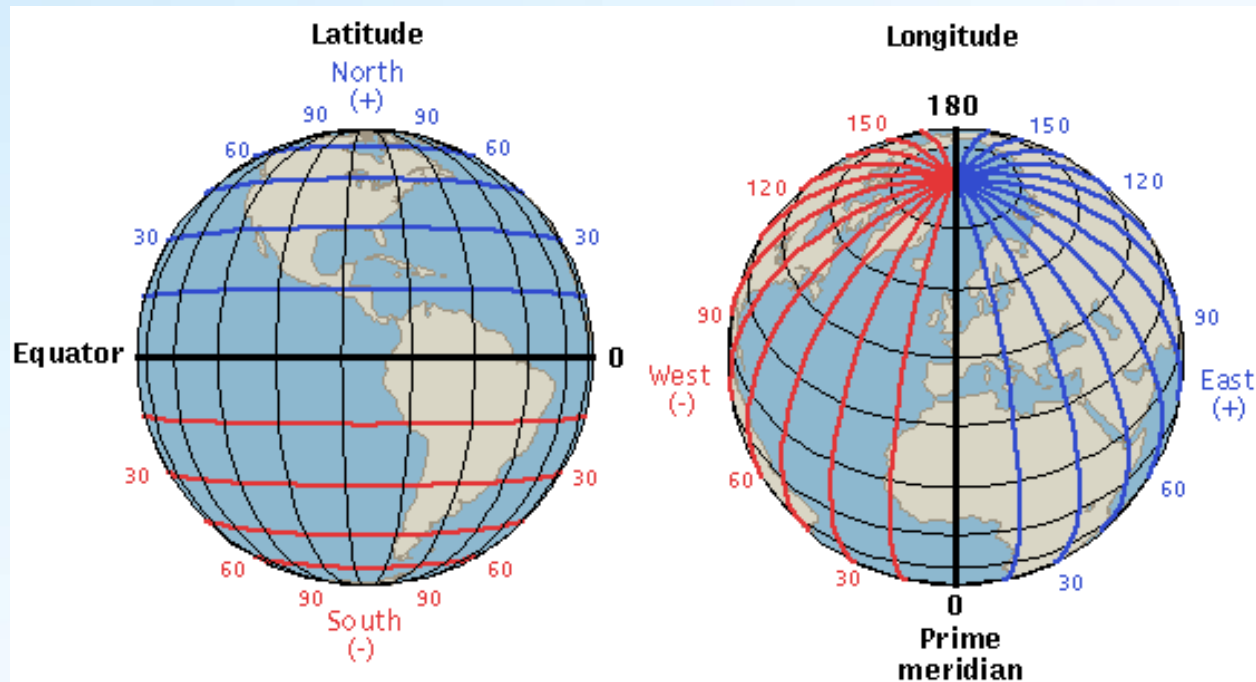


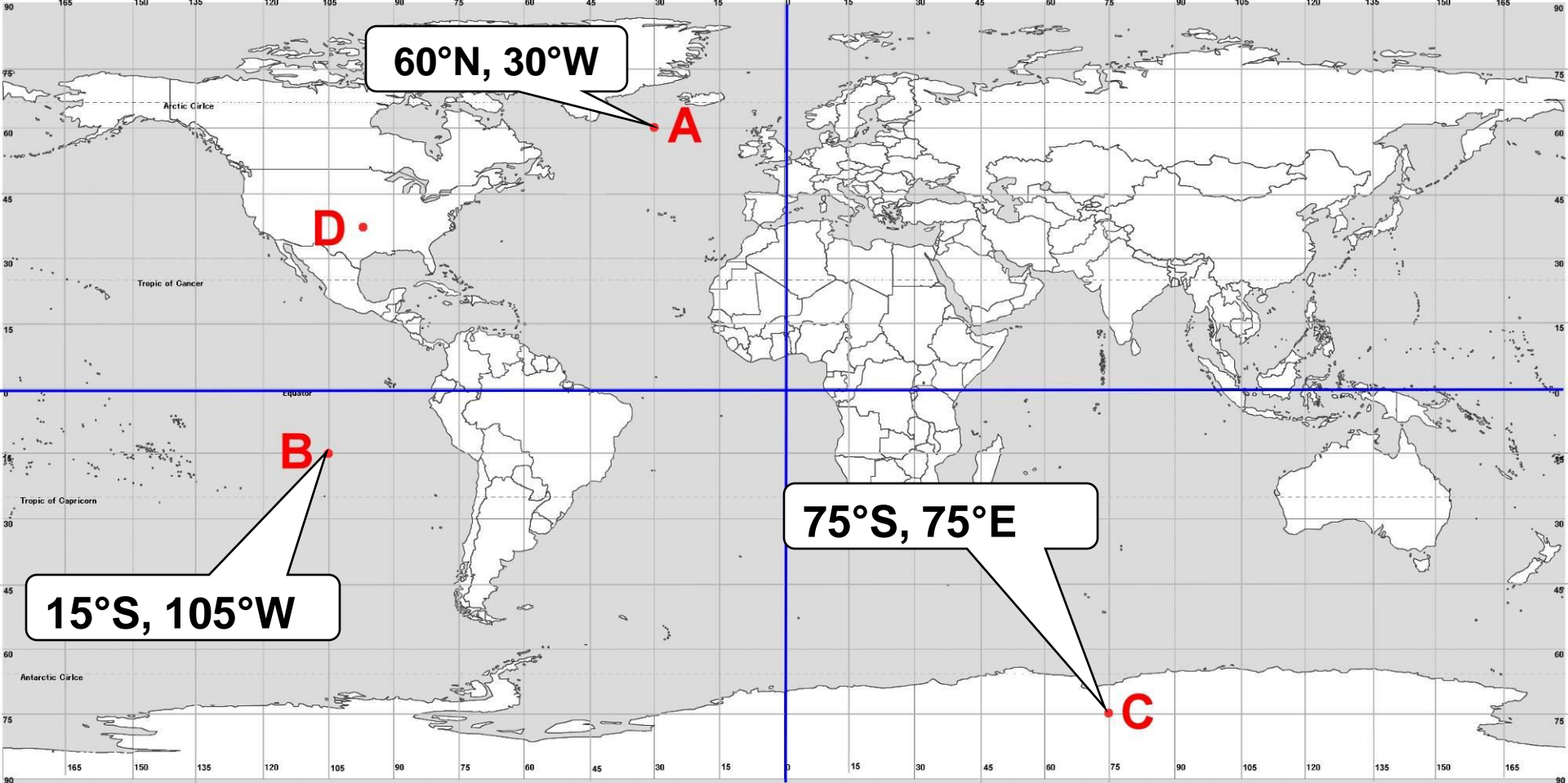
Any location east of the prime meridian is an **EAST LONGITUDE**

# >> By combining latitude and longitude, any location can be pinpointed.

Steps to find Absolute Location using Latitude and Longitude Lines.

1. Find the degree measure on the Latitude Line North or South. (x-axis)
2. Find the degree measure on the Longitude Line East or West. (y-axis)
3. Connect the lines and say the Location of intersection. (x , y) coordinate)





Each box on this map is 15°. With that in mind how can we identify specific locations (red dots)? Remember, write latitude first!

What are the coordinates of location.....**A**

What are the coordinates of location.....**B**

What are the coordinates of location.....**C**

But what about location **D** ? It's in the middle of a box. What do we do now?

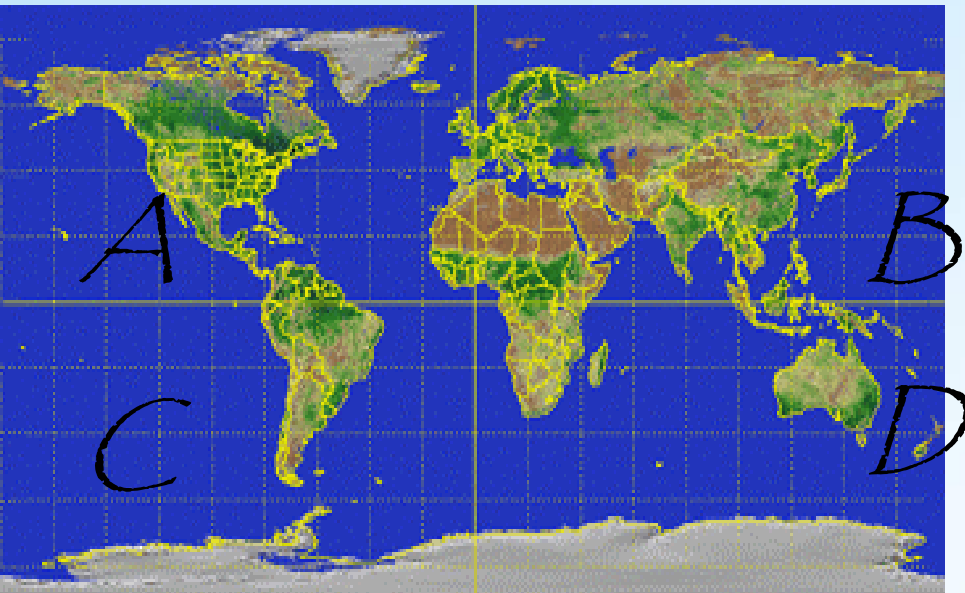
**>> Here are some things to remember:**

**> Latitude** is written **first** and must always include **N (north)** or **S (south)** of the equator.

**> Longitude** is written **next** and must always include **E (east)** or **W (west)** of the prime meridian.



# See If You Can Tell In Which Hemispheres These Lon/Lats Are Located



- 1.  $41^{\circ}\text{N}$ ,  $21^{\circ}\text{E}$
- 2.  $37^{\circ}\text{N}$ ,  $76^{\circ}\text{W}$
- 3.  $72^{\circ}\text{S}$ ,  $141^{\circ}\text{W}$
- 4.  $7^{\circ}\text{S}$ ,  $23^{\circ}\text{W}$
- 5.  $15^{\circ}\text{N}$ ,  $29^{\circ}\text{E}$
- 6.  $34^{\circ}\text{S}$ ,  $151^{\circ}\text{E}$



*Let's See How*

*You Did!*

- **1. B**
- **2. A**
- **3. C**
- **4. C**
- **5. B**
- **6. D**





# Now you're ready to find some locations on a map!

