

TRAVERSE ACTIVITY 1

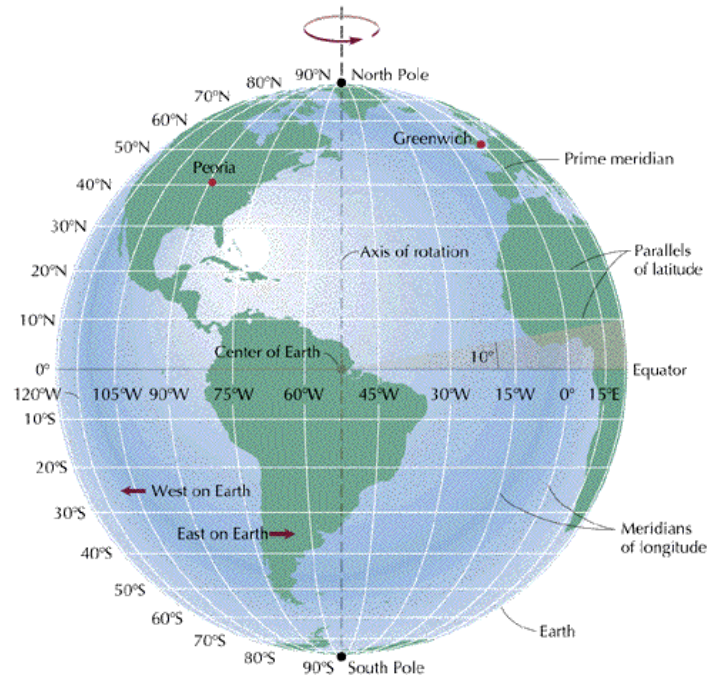
NAME _____

#1) Latitude/Attitude:

Latitudes are the measurements that form 'ladder like' rungs around the globe from the very bottom (below where it notes South Pole) to the very top (below where it notes North Pole). You will see that degrees latitude are numbered from 0° to 90° north and south. As you change latitude lots of things change...temperature, daylight hours and lots of other things. Can you think of two other things that might change with latitude?

Answer: _____

Each white line of latitude circling the globe below is equally distanced from the one below it and the one above it. Each 10 degree measures 692 miles or ~ 690 miles. How do we know this? At the equator the Earth measures 24,901.92 miles and since the Earth is a circle there are 360 degrees in it. If you divide 24,901.92 miles/360 degrees you get 69.2 miles for each degree of latitude...so from 0° to 1° is ~69 miles and from 89° to 90° is ~69 miles.



(image from <http://www.montgomerycollege.edu>)

Let's check the latitudes of my destinations. Use a colored marker and put an X on the globe next to each of the locations below. So if each degree of latitude is ~69 miles how many miles of latitude did I travel? (Don't let the N and S fool you!). Answer _____

New York City 40.71° N

Los Angeles 34.05° N

Christ Church 43.53° S

McMurdo 77.85° S

Lamont-Doherty Earth Observatory For more activities see:
<http://www.ldeo.columbia.edu/edu/polareducation/>

#2) Plan your own trip:

Using the website (<http://www.geobytes.com/citydistancetool.htm>) locate your starting airport (note that this might not be the same city as where you live). Then if you are in the U.S. select Los Angeles (L.A.) airport as your destination. How many miles is that? Now enter the information to fly from L.A. to Christchurch, New Zealand and get that total. I filled in the Christchurch to McMurdo in Antarctica since this isn't on the website.

YOU:

Home airport to L.A. _____

LA to Christchurch _____

Christchurch to McMurdo 2415 miles

TOTAL TRAVEL _____ miles

BETH:

Denver Colorado to L.A. _____

LA to Christchurch _____

Christchurch to McMurdo 2415 miles

TOTAL TRAVEL _____ miles

ADRIENNE (ME!)

New York City to L.A. _____

LA to Christchurch _____

Christchurch to McMurdo 2415 miles

TOTAL TRAVEL _____ miles

Who had the longest trip? _____

JUST FOR FUN:

Make a list of things to pack for your trip to Antarctica. Be sure to include one item that starts with each of the following letters. Compare with your friends!

A _____

N _____

T _____

A _____

R _____

C _____

T _____

I _____

C _____

A _____