**How to Use Latitude & Longitude**

When you are using Latitude & Longitude, it is similar to using \_\_\_\_\_\_\_\_\_\_\_\_\_ paper.

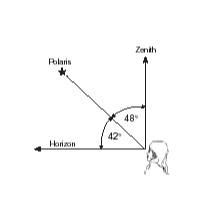
1. **LATITUDE:**
   * Latitude lines run from \_\_\_\_\_\_ (the least) degrees latitude to \_\_\_\_\_ (the most) degrees latitude.
   * The starting line of latitude or ZERO degrees is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   * 90o North and 90o South are known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   * Draw and label those 3 important Latitude lines.
2. **Writing Latitude**

* The two directions that Latitude measures is either **\_\_\_\_\_\_\_\_\_\_\_\_** or **\_\_\_\_\_\_\_\_\_\_\_.**
* Just like climbing ***up*** (\_\_\_\_\_\_\_\_\_\_\_\_) or ***down*** (\_\_\_\_\_\_\_\_\_\_\_\_\_\_) on a ladder!
* Latitude measurements are written \_\_\_\_\_\_\_\_\_\_\_\_\_.
* If your latitude is 57oS, then you are in the \_\_\_\_\_\_\_\_\_\_ (direction) hemisphere or \_\_\_\_\_\_\_\_\_ the equator.

1. **Polaris & Latitude**

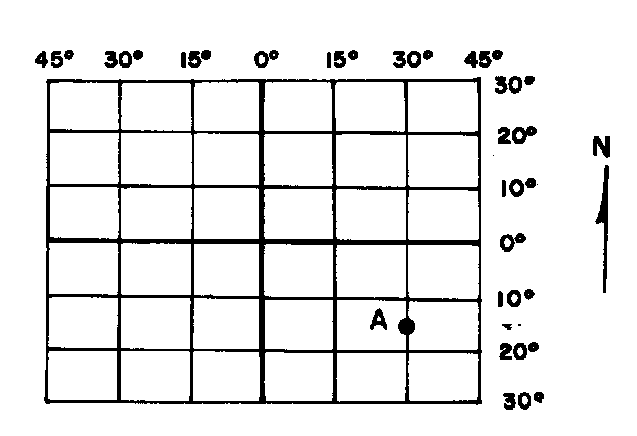
* Using the circle above, *DRAW* in the star Polaris where it should be located.
* Polaris can only be seen in the \_\_\_\_\_\_\_\_\_\_\_\_ (direction) hemisphere.
* You can find your latitude, by measuring how high Polaris is in the \_\_\_\_\_\_\_\_\_\_ (direction) sky.

*the altitude of polaris is equal to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!*



* If you measure Polaris to be 42o above the horizon then your latitude is \_\_\_\_ and the direction is \_\_\_\_\_\_\_\_.

**C**



* ***Trace*** & ***Label*** the Equator.

**B**

* Label the Latitude compass directions next to each degree.
* What is the ***degree of latitude*** & ***direction*** for the following points?

**A** - \_\_\_\_\_\_\_\_\_\_\_\_ **C** - \_\_\_\_\_\_\_\_\_\_\_\_

**D**

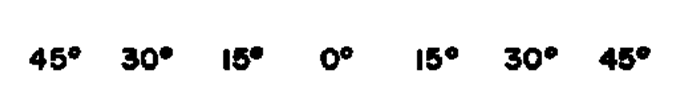
**B** - \_\_\_\_\_\_\_\_\_\_\_\_ **D** - \_\_\_\_\_\_\_\_\_\_\_\_

1. **LONGITUDE:**
   * Longitude lines run from \_\_\_\_\_\_ (the least) degrees longitude to \_\_\_\_\_ (the most) degrees longitude.

* The starting line of longitude or ZERO degrees is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* The highest line of longitude or 180o is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Lines of longitude ALL meet at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Draw what lines of longitude look like.

1. **Writing Longitude**

* The two directions that Longitude measures is either **\_\_\_\_\_\_\_\_\_\_\_\_** or **\_\_\_\_\_\_\_\_\_\_\_.**
* This is like moving \_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_ across a map.
* If your longitude is 165oW, then you are in the \_\_\_\_\_\_\_\_\_\_\_ (direction) hemisphere or \_\_\_\_\_\_\_\_\_\_\_\_ of the Prime Meridian.



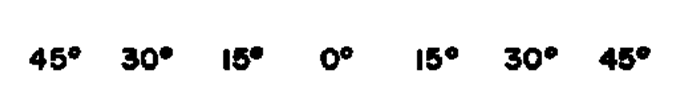


* ***Trace*** & ***Label*** the Prime Meridian.
* Label the Longitude compass directions next to each degree.
* What is the ***degree of longitude*** and ***direction*** for each of the following points?

**A** - \_\_\_\_\_\_\_\_\_\_ **C** - \_\_\_\_\_\_\_\_\_\_

**B** - \_\_\_\_\_\_\_\_\_\_ **D** - \_\_\_\_\_\_\_\_\_\_

***Now put it all together!***



**Point C:**

Latitude Longitude

\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_

**Point A:**

Latitude Longitude

\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_



**Point D:**

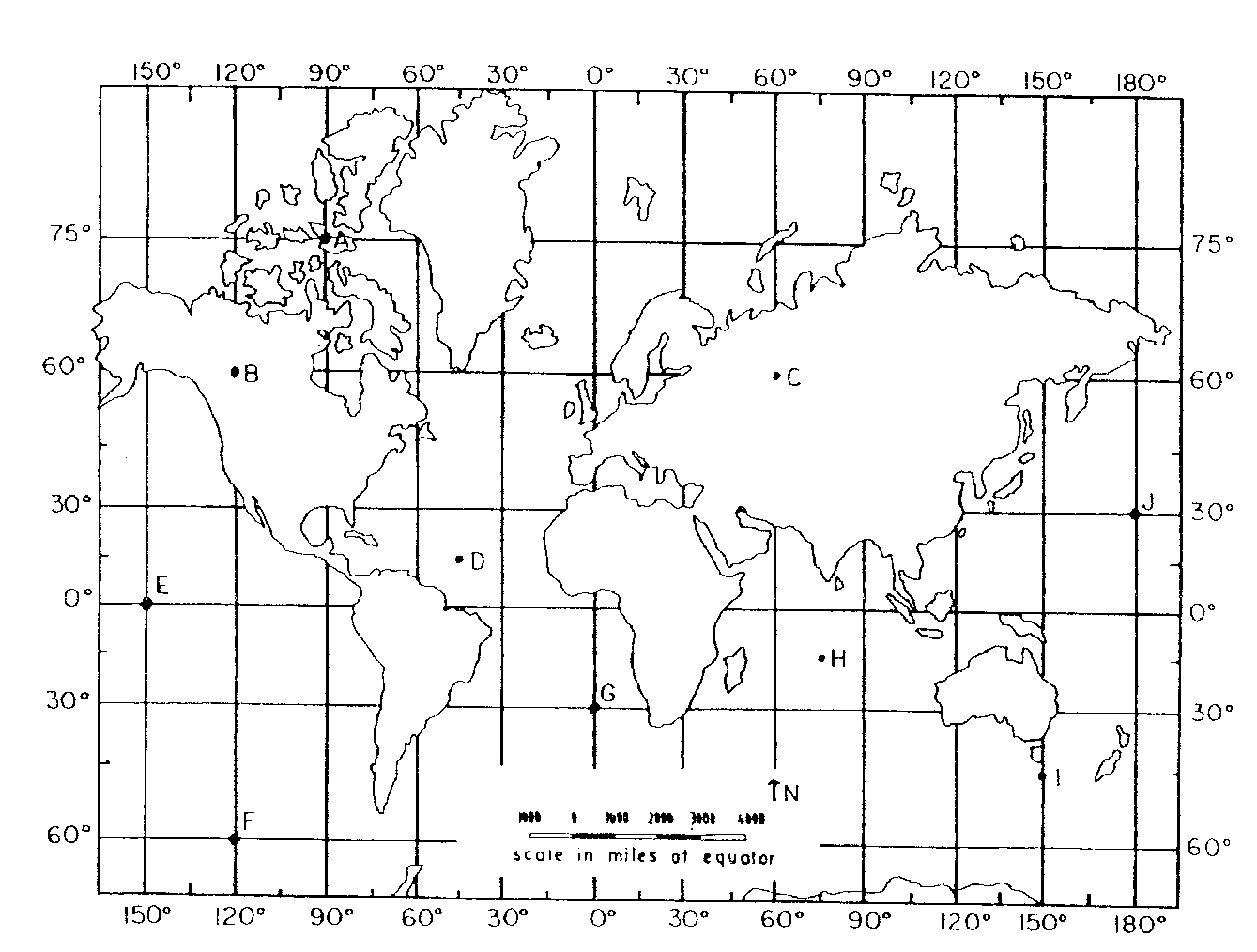
Latitude Longitude

\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_

**Point B:**

Latitude Longitude

\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_



***Directions:***

1. Start by labeling your compass directions next to your degrees of Latitude.
2. Label your compass directions next to your degrees of Longitude.
3. Complete the table below for locations A – I.
4. You ***DO NOT*** use minutes on this map, only on the NYS Map in the ESRT!!

Example: 45oN, 10oE

|  |  |  |
| --- | --- | --- |
| **Location** | **Latitude**  **(degrees, direction)** | **Longitude**  **(degrees, direction)** |
| **A** |  |  |
| **B** |  |  |
| **C** |  |  |
| **D** |  |  |
| **E** |  |  |
| **F** |  |  |
| **G** |  |  |
| **H** |  |  |
| **I** |  |  |