

# MAPPING FUNDAMENTALS

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# MAPPING FUNDAMENTALS

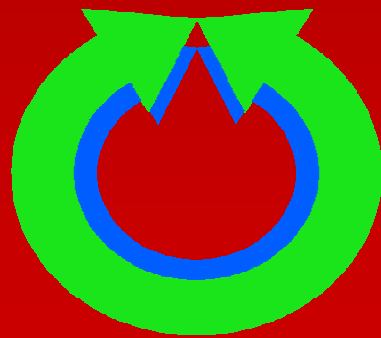
In the following modules you will:

- review some basic geometry
- Latitude and Longitude -how to find a location
- UTM -how to find or give a location
- Township/Range -how to find a location

# MAPPING FUNDAMENTALS

Lets review some basics such as :

The number of degrees in a circle ?



360  
degrees !

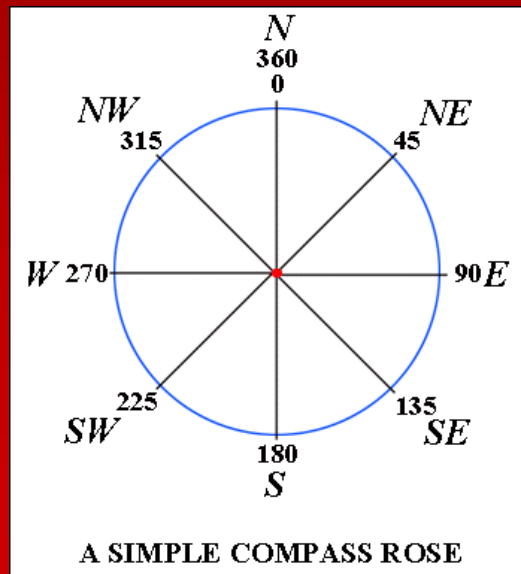
# MAPPING FUNDAMENTALS

Remember each Degree is divided into 60 Minutes and.....

each minute can be divided into 60 Seconds !!!!

# MAPPING FUNDAMENTALS

Let's look at how this applies to a compass.



Here the degrees are applied to the directions.

North can be thought of as being 360 degrees or zero degrees.

South is 180 degrees.

# MAPPING FUNDAMENTALS



Remember from your school days,  
the model of the world called a “globe”



# MAPPING FUNDAMENTALS



Remember from your school days,  
the model of the world called a “globe”

NORTHERN  
HEMISPHERE



EQUATOR

SOUTHERN  
HEMISPHERE

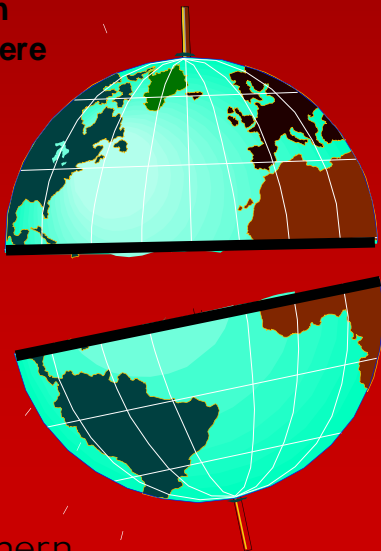
The imaginary line  
that runs around the  
world, dividing it  
into the North half  
and South half is  
called the EQUATOR

# MAPPING FUNDAMENTALS



Remember from your school days,  
the model of the world called a “globe”

Northern  
Hemisphere



Southern  
Hemisphere

The EQUATOR cuts the world into Northern and Southern Hemispheres.

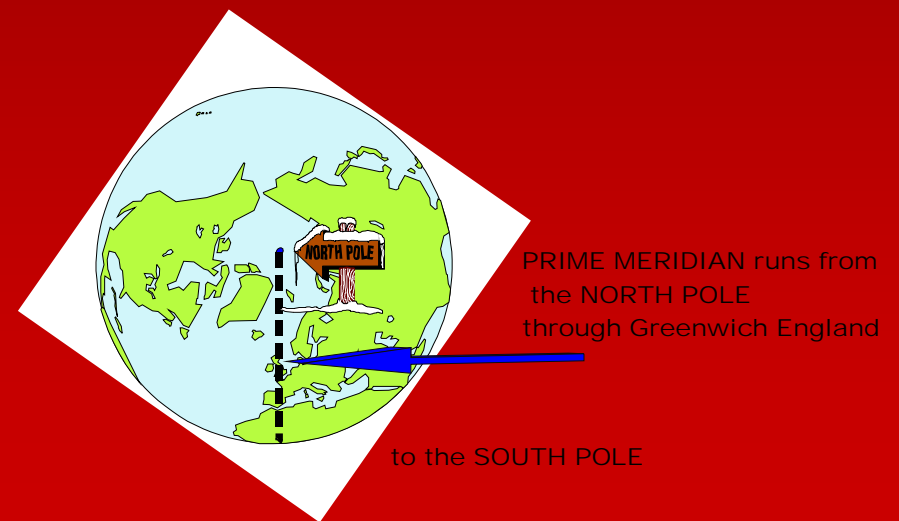


# MAPPING FUNDAMENTALS



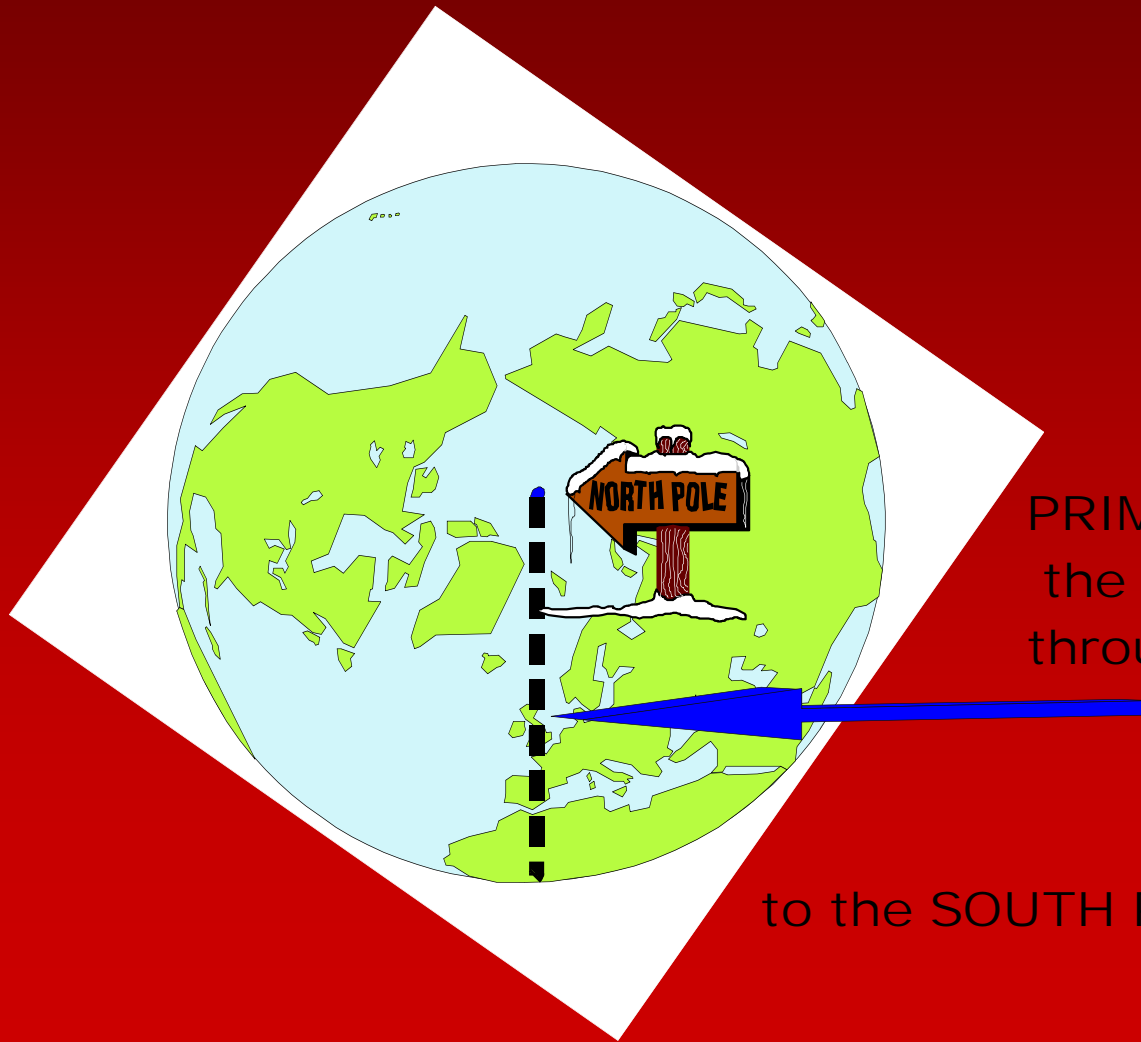
- Remember that the world is also divided into an EASTERN and WESTERN Hemisphere by two more imaginary lines.
- The first is called the PRIME MERIDIAN which runs from the North Pole to the South Pole through the town of Greenwich in England.

Looking down on the World from the North Pole



# MAPPING FUNDAMENTALS

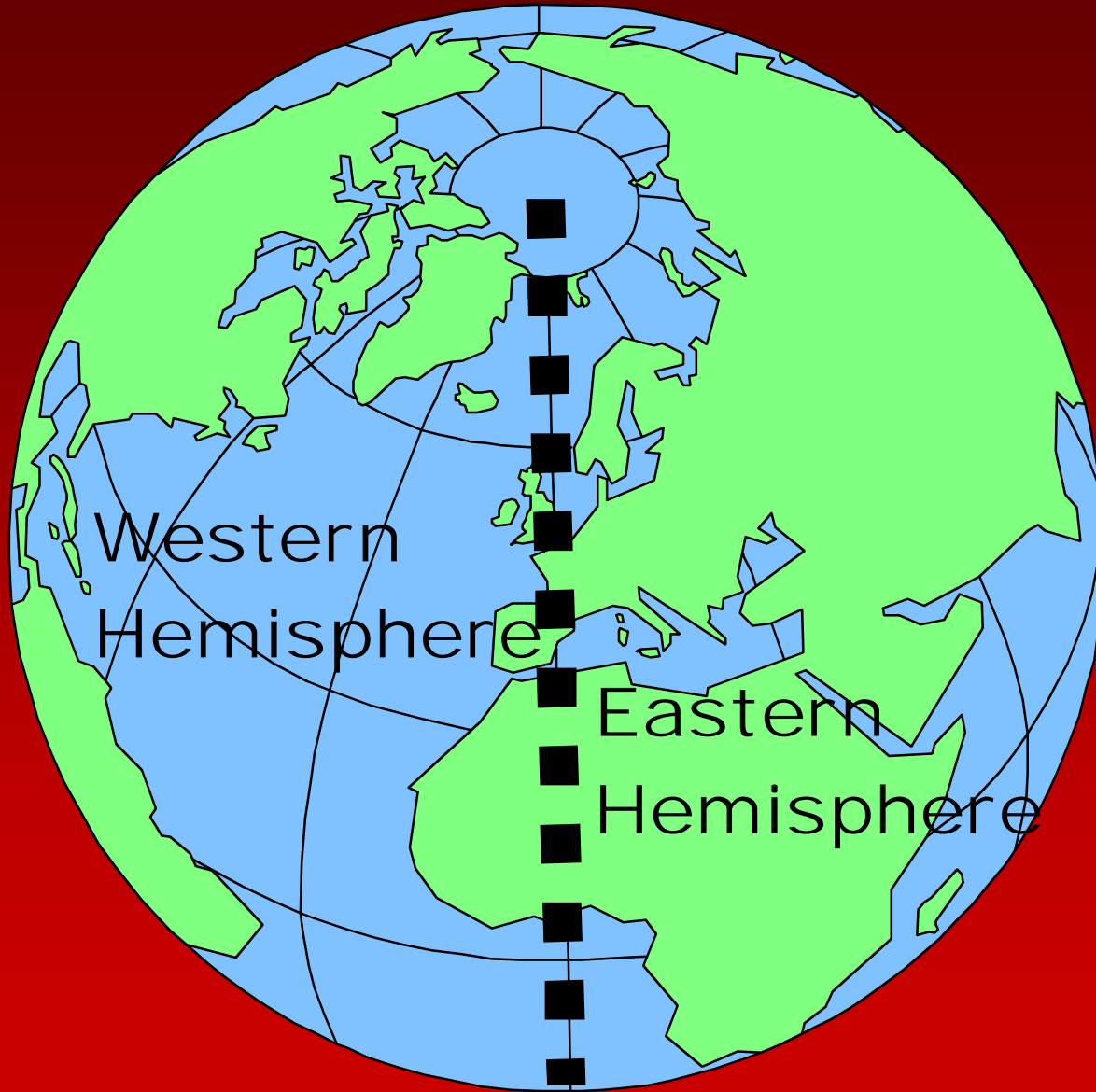
Looking down on the World  
from the North Pole



PRIME MERIDIAN runs from  
the NORTH POLE  
through Greenwich England

to the SOUTH POLE

# MAPPING FUNDAMENTALS

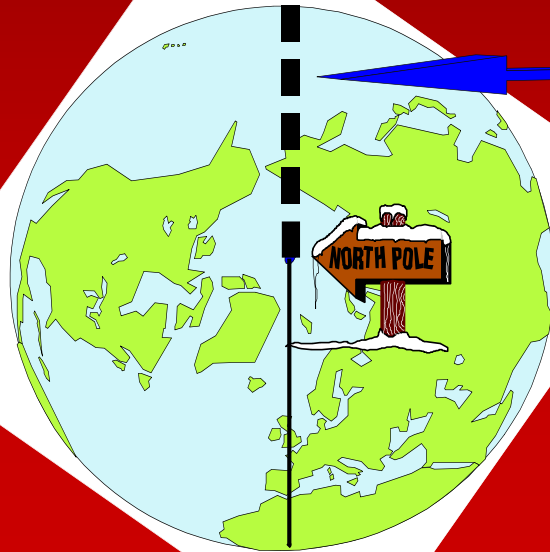


# MAPPING FUNDAMENTALS



On the other side of the world, 180 degrees, is the other line running from pole to pole called the **INTERNATIONAL DATE LINE**.

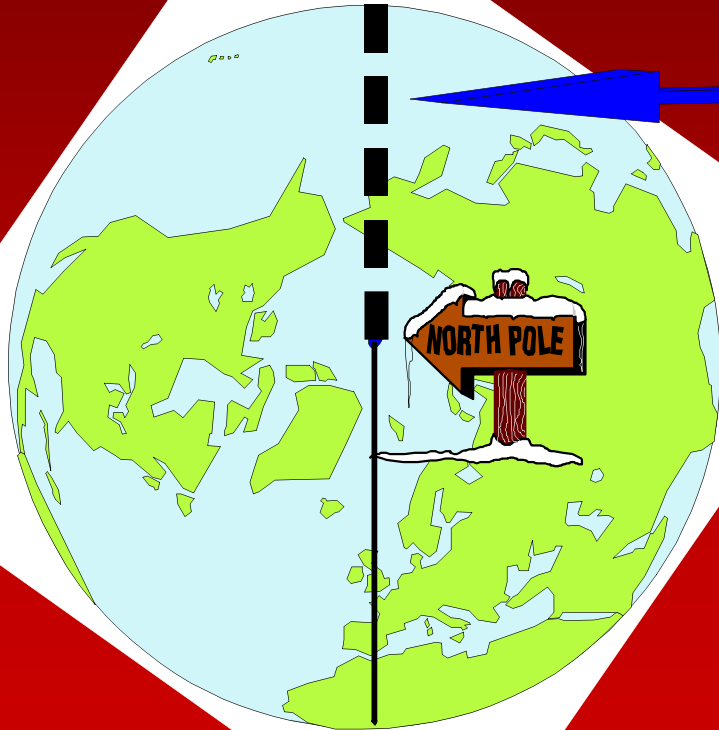
Looking down on the World  
from the North Pole



The **INTERNATIONAL DATE LINE** runs from the **NORTH POLE** through the Pacific Ocean to the **SOUTH POLE**

# MAPPING FUNDAMENTALS

Looking down on the World  
from the North Pole



The INTERNATIONAL DATE LINE  
runs from the NORTH POLE  
through the Pacific Ocean  
to the SOUTH POLE

# MAPPING FUNDAMENTALS

Eastern  
Hemisphere



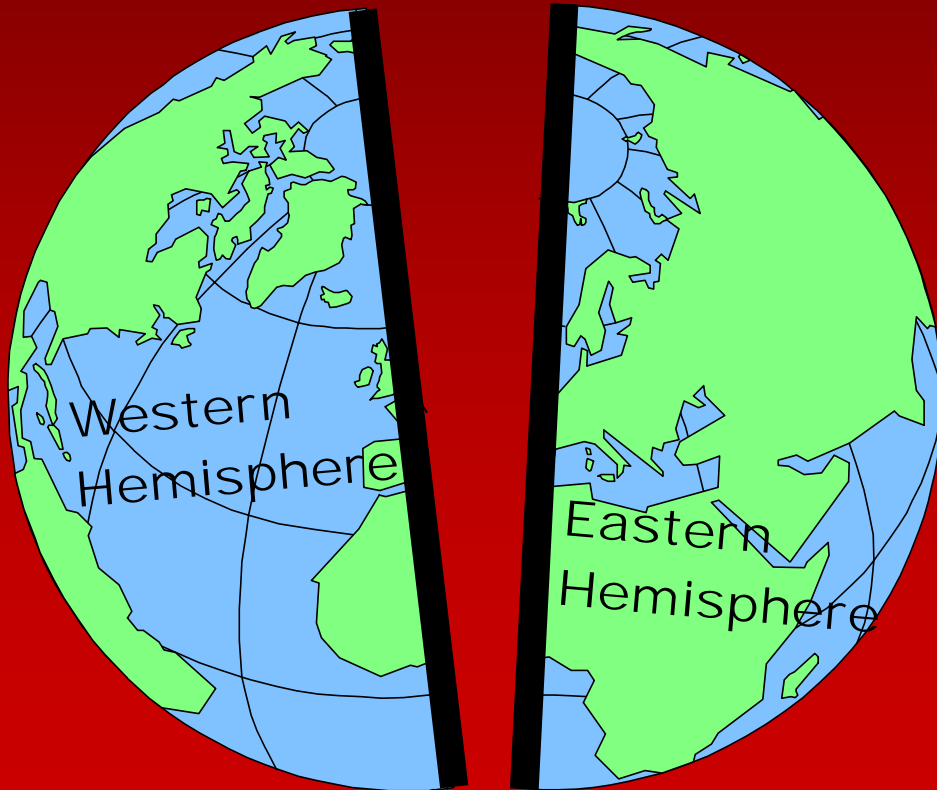
Western  
Hemisphere

INTERNATIONAL  
DATE LINE



180 DEGREES  
from Greenwich

# MAPPING FUNDAMENTALS



Together the Prime Meridian and the International Date Line divide the world into West and East halves or Hemispheres.

# MAPPING FUNDAMENTALS

- Now it is time to review what we have reviewed!

The number of degrees in a circle ?                      360 degrees

A degree can be divided into how many minutes ?                      60 minutes

Each minute can be divided into how many seconds ?                      60 seconds

The line that separates the Northern Hemisphere and the Southern Hemisphere is called the ....?                      EQUATOR

The PRIME MERIDIAN runs through what Town in England?                      GREENWICH



# MAPPING FUNDAMENTALS

Some more review .....

What two lines separate the Western Hemisphere and the Eastern Hemisphere ?

Prime Meridian and the International Date Line

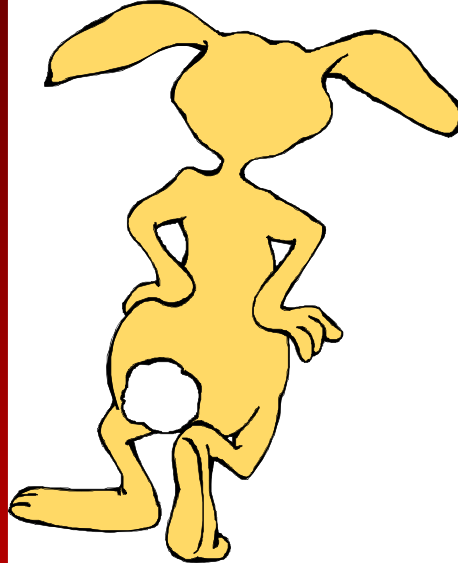
If the Prime Meridian is 0 degrees, What is the International Date Line ?

180 degrees

You have done well.....It is time to move on to .....

## Latitude and Longitude

# MAPPING FUNDAMENTALS



**THE  
END**