## SCIB 265L History of Science

FA18 Week 4: Spanish Empire Mapmaking
NAME: $\qquad$
Section: $\qquad$

## BACKGROUND:

## Latitude



Lines of latitude measure north-south position between the poles. The equator is defined as 0 degrees, the North Pole is 90 degrees north, and the South Pole is 90 degrees south. Lines of latitude are all parallel to each other, thus they are often referred to as parallels.

## Longitude



Lines of longitude, or meridians, run between the North and South Poles. They measure east-west position. The prime meridian is assigned the value of 0 degrees, and runs through Greenwich, England. Meridians to the west of the prime meridian are measured in degrees west and likewise those to the east of the prime meridian are measured to by their number of degrees east.

Accuracy
Accuracy is how close a measured value is to the actual (true) value.

Precision
Precision is how close the measured values are to each other.

Examples of Accuracy and Precision:


Source: https://www.mathsisfun.com/accuracy-precision.html

## Solar Declination



Solar declination is defined as "the angle between the Sun's rays and the equatorial plane"...the solar declination on any particular day of the year can be calculated.


Source: http://www.reuk.co.uk/wordpress/solar/solar-declination/

