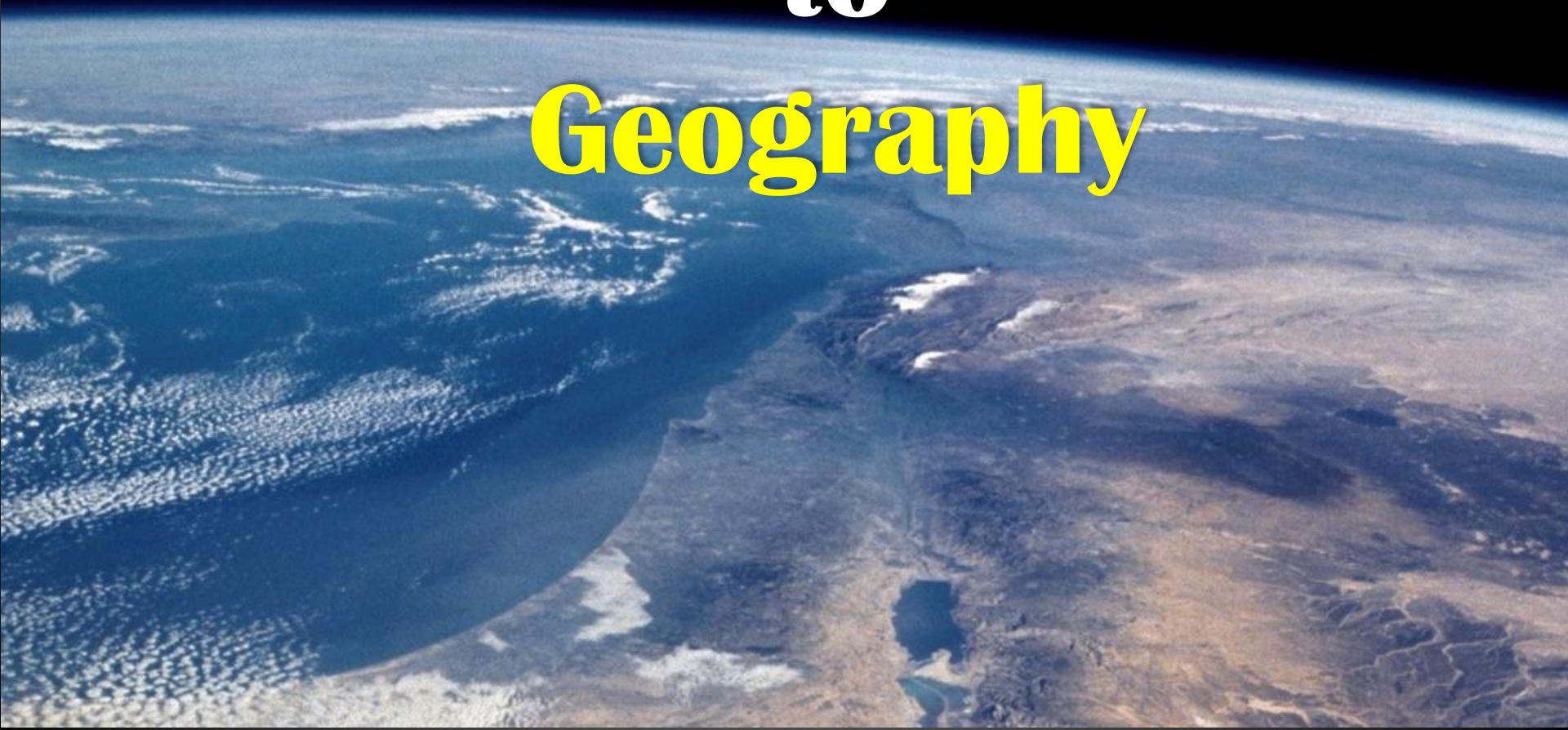
A collage of vintage geographical items. On the left is a small globe with a brass stand, showing parts of Asia and the Pacific. In the center is a rolled-up, aged map tied with a string. On the right is a brass compass rose with a blue face and gold markings. The background is a large, crumpled, antique map with various geographical labels and a grid of latitude and longitude lines. The overall color palette is warm, dominated by browns, golds, and muted greens.

Human Geography

Unit 1: Basic Concepts

Introduction to

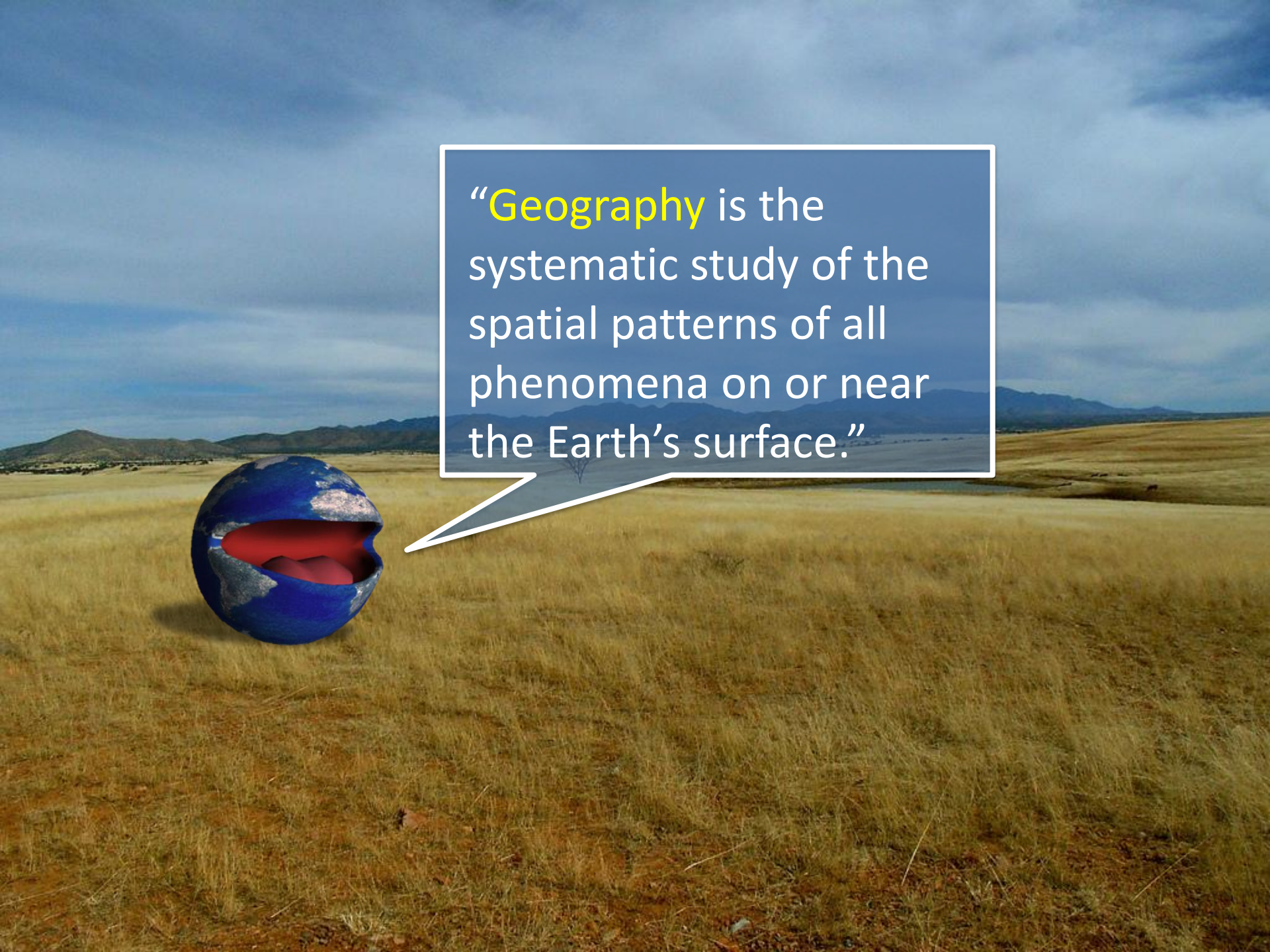
Geography





What is a geography?





“**Geography** is the systematic study of the spatial patterns of all phenomena on or near the Earth’s surface.”

Geography is:



A scientific and descriptive study of the Earth's surface.

Geography is:



**Interactions between people and
their environment**

Geography is:

An aerial, black and white photograph of a coastal landscape. In the foreground, there is a dense urban area on the left and a large, organized agricultural field with a grid pattern. A wide river or estuary flows through the middle ground, branching into smaller channels. The background shows a vast body of water under a cloudy sky. The text 'A study of spatial and local variation.' is overlaid in the bottom right corner.

A study of **spatial and **local** variation.**

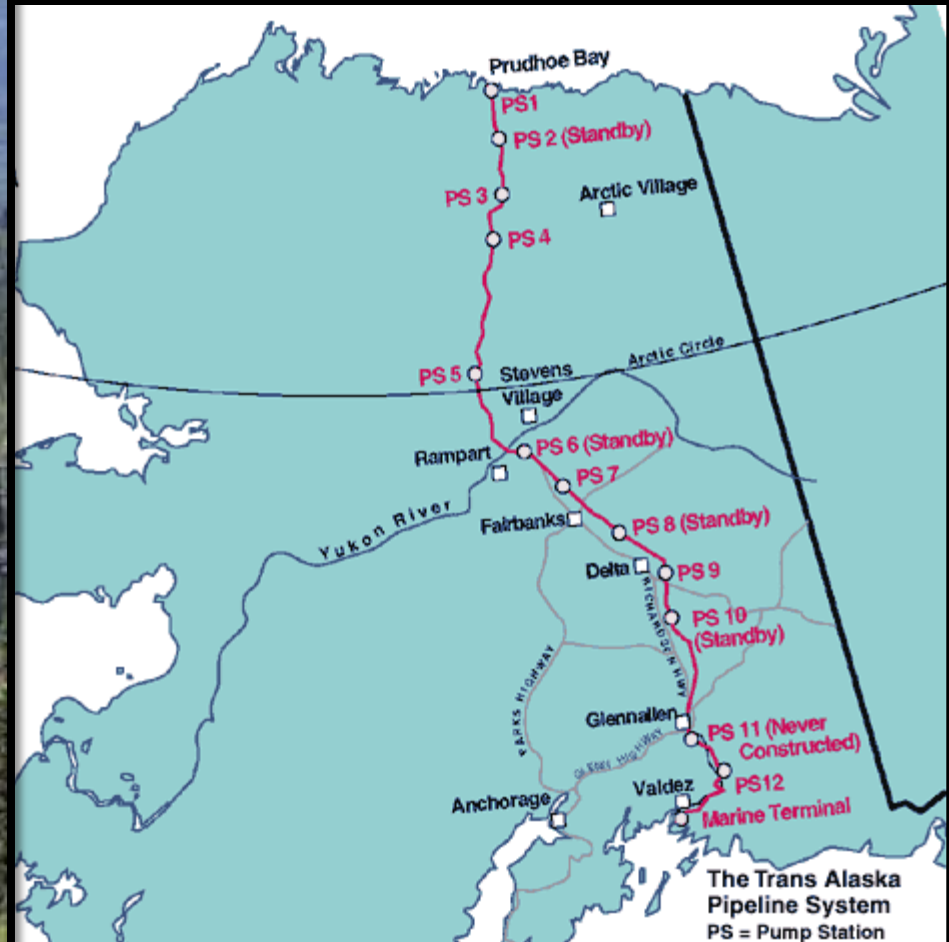
An aerial photograph of a rural landscape. The scene is dominated by vibrant green fields, some of which are divided into smaller plots by dark green hedges and rows of trees. A dirt road or path winds through the fields from the bottom left towards the center. In the distance, there are clusters of trees, a small pond, and some buildings, suggesting a farm or village. The overall impression is one of a well-maintained, agricultural landscape.

Geography is:

A
Study
Of
Spatial
Patterns.



What is the
why
Of **where?**



What is the above a picture of? Why might it have been built the way that it was?

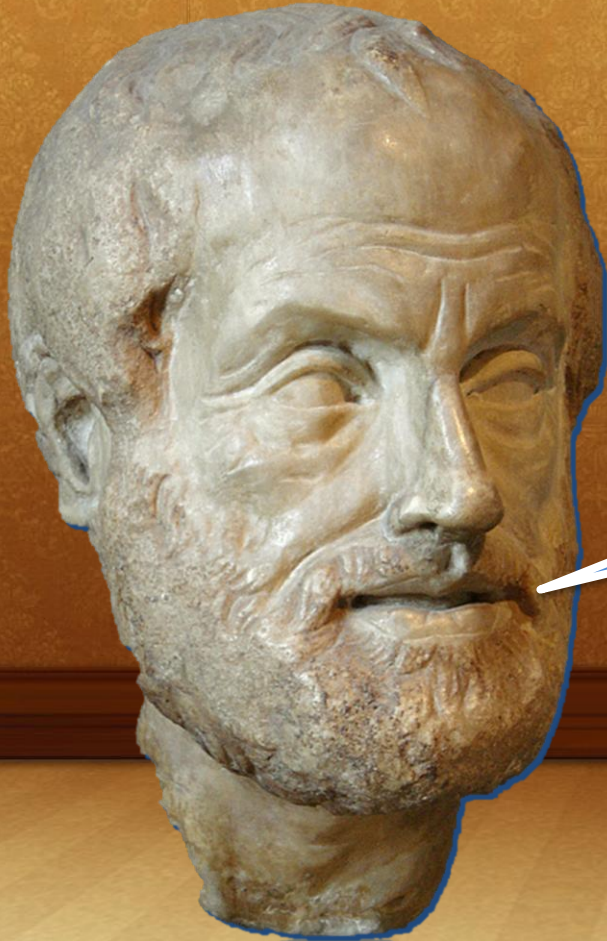


In this **night picture** of the earth, why are some areas **brighter** than others? How would it have looked **200 years ago**?



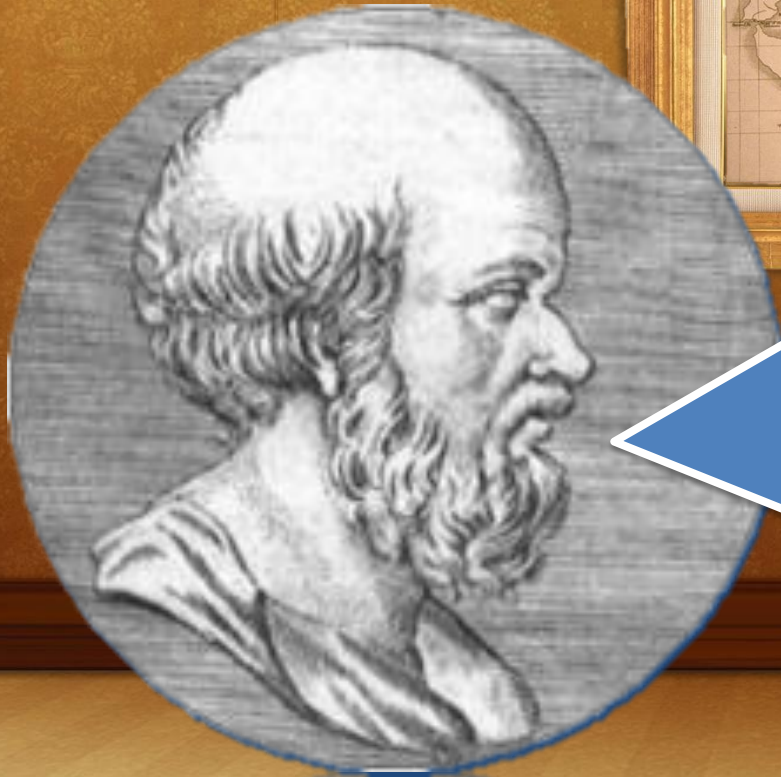
Who are some important Geographers?

Aristotle (384 BCE – 322 BCE)



I was the first person
to demonstrate that
the Earth was
spherical.

Eratosthenes (3rd Century BCE)

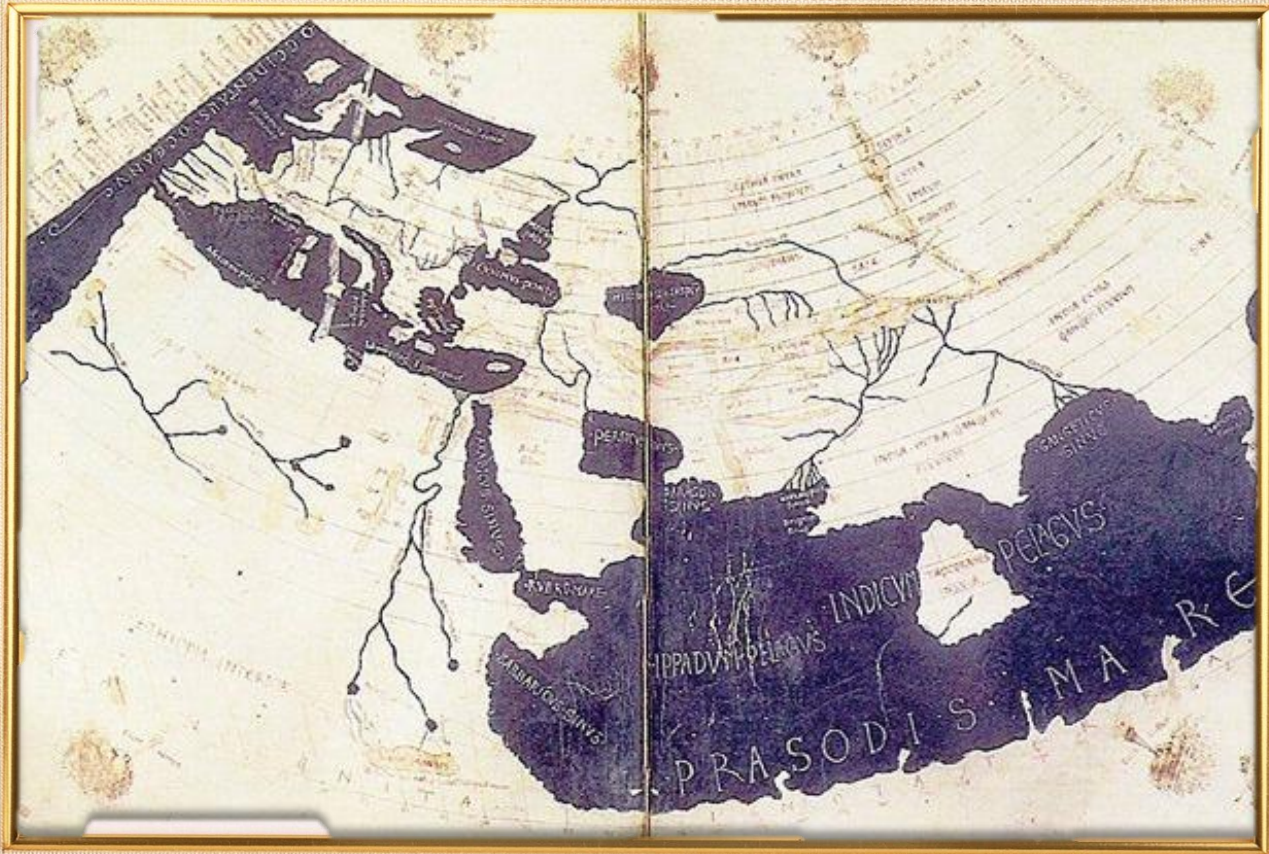


I accurately calculated the **circumference** of the earth using **geometry** and was the first known person to use the word **geography**.

Claudius Ptolemy (CE 90 – CE 168)



I wrote a book called **Geography** and designed the forerunner to **longitude** and **latitude** lines.



Abu Abd Allah Muhammad al-Idrisi al-Qurtubi al-Hasani al-Sabti

Al Idrisi (1099–1165)



I'm an Arabic geographer who worked for the **King of Sicily** to create an accurate representation of the world.

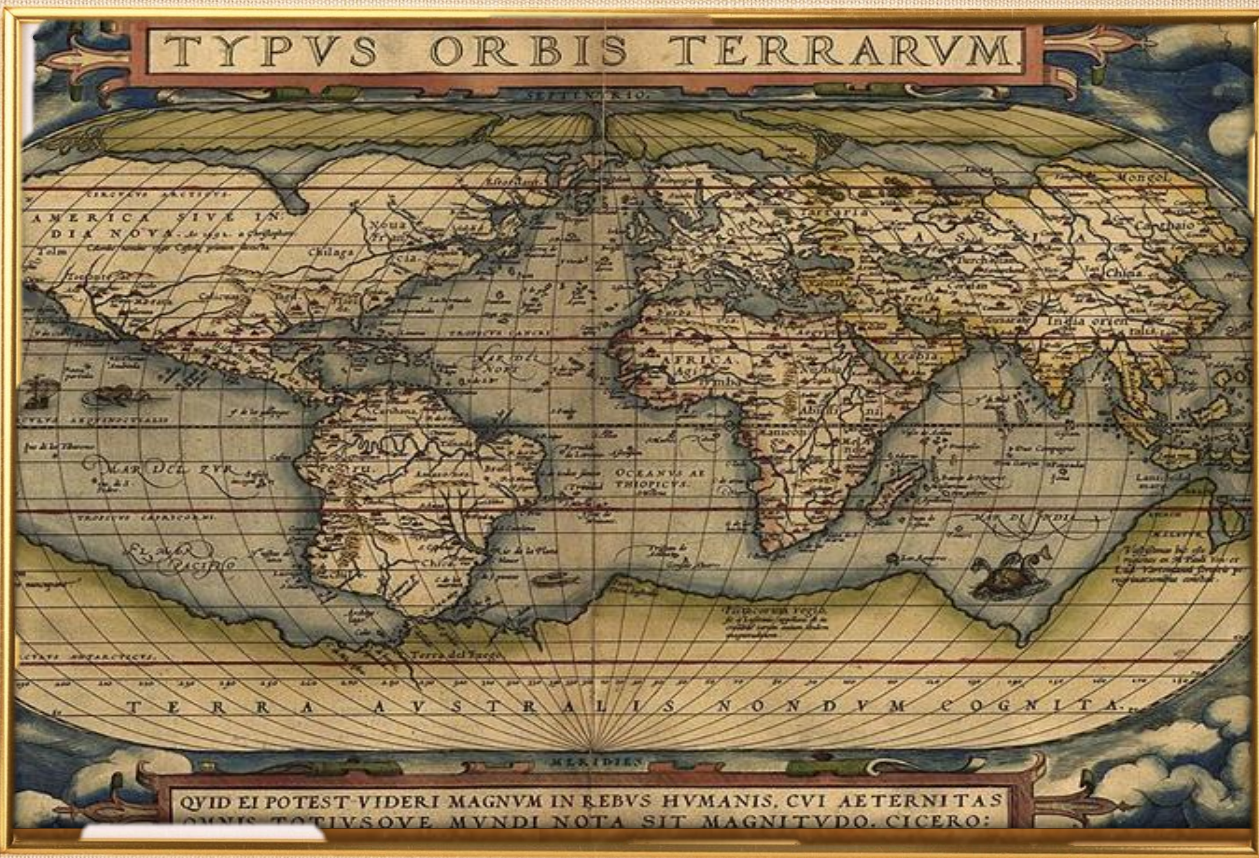


Abraham Ortelius (1527 – 1598)



I designed the first modern atlas: *Theatre of the World*.

TYPVS ORBIS TERRARVM



QVID EI POTEST VIDERI MAGNVM IN REBVS HVMANIS, CVI AETERNITAS
OMNIS TOTIVSVE MYNDI NOTA SIT MAGNITVDO. CICERO:



What is a map-scale?



“A **map-scale** shows the relationship of a feature’s size on a map to its actual size on Earth.”

1:24,000

Ratio or Fraction

1/100

Map Scale

Graphic Scale

Written scale

0 |-----| 100km

1 inch equals one mile



Which would be a good scale for viewing a **classroom, a **school**, a **state**, a **country**?**

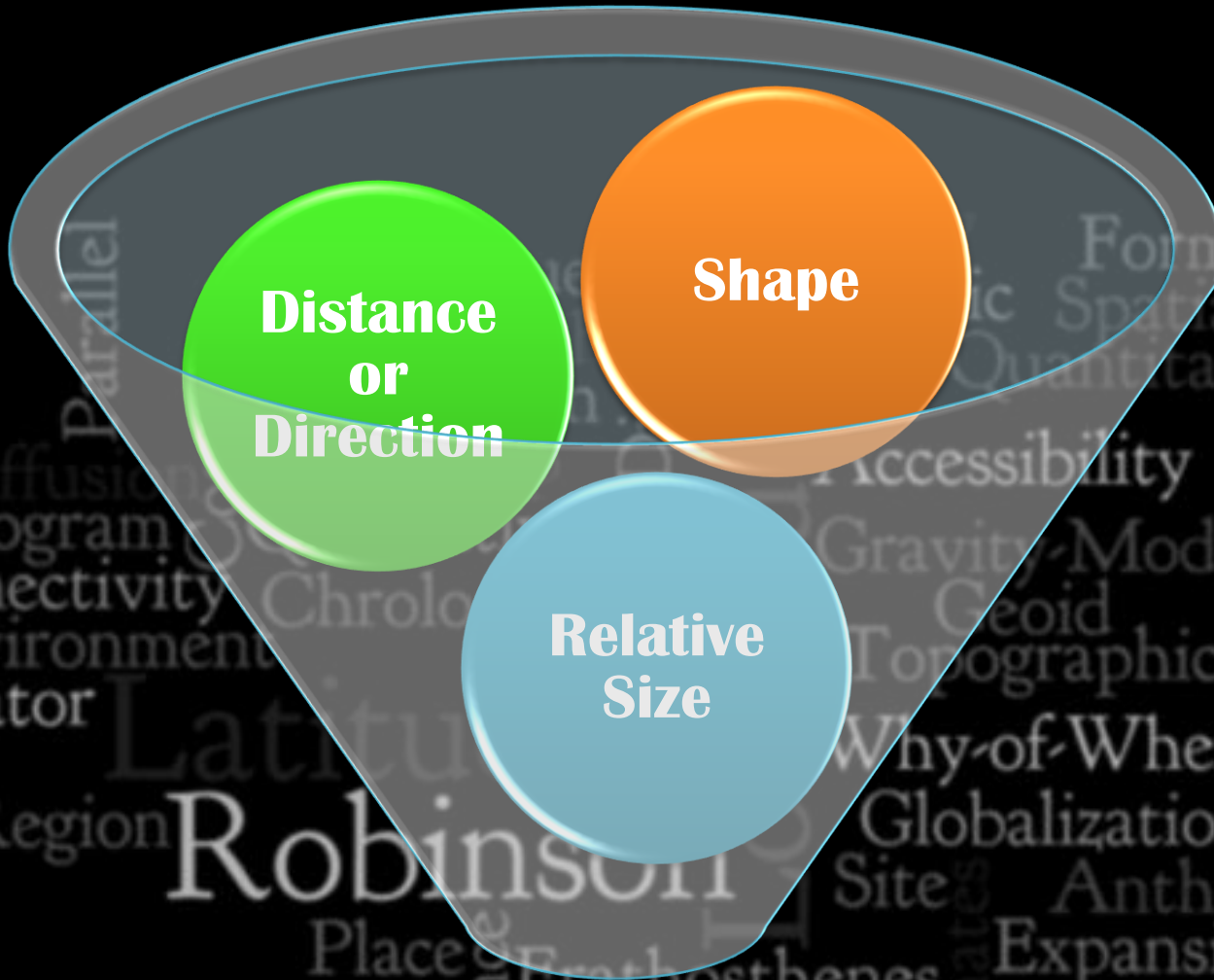
- A) 1 in:1000miles**
- B) 1 in:100miles**
- C) 1 in:10feet**
- D) 1 in:100ft**

A photograph of a desert landscape with large, light-colored rock formations in the foreground and a clear blue sky. The scene is projected onto a screen in a dark room, with some ceiling lights visible. A red text box with white text is overlaid on the center of the image.

What is projection?

“**Projection** is the scientific method of transferring location on Earth’s surface to a flat map.”





**Distance
or
Direction**

Shape

**Relative
Size**

Distortion

Mercator Projection

**Distortion:
Size and Shape**

**The standard map projection for
nautical purposes.**



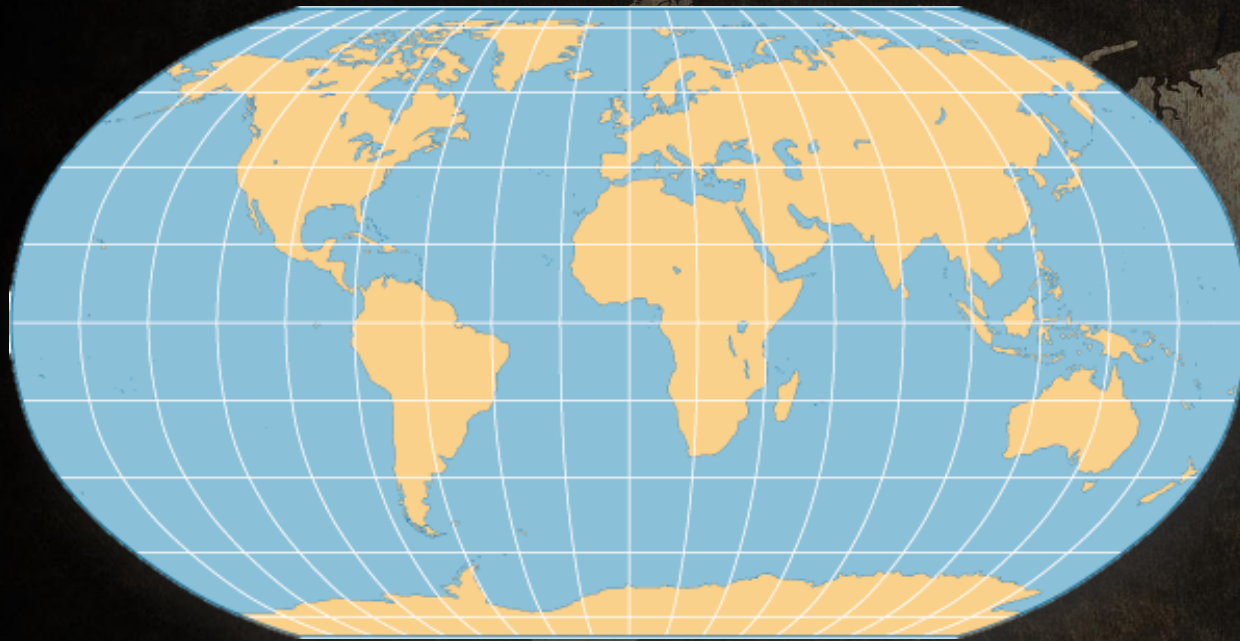
Mollweide Projection



**Distortion:
Shape and Angle**

Primarily used where accurate representation of area takes precedence over shape

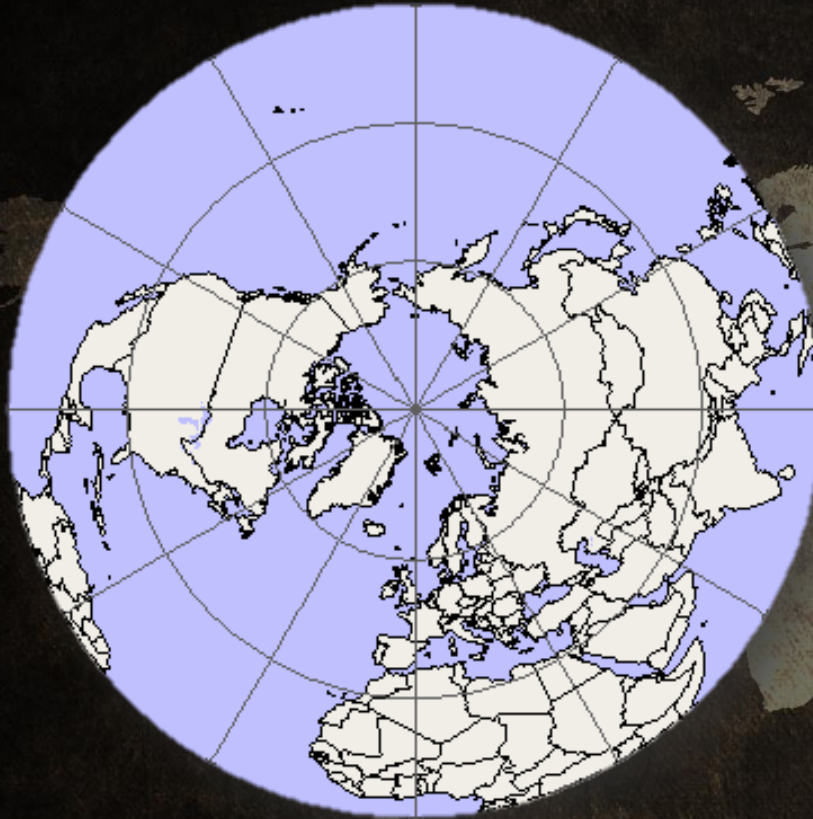
Robinson Projection



Distortion:
Everything
in small
amounts.

Primarily used to create visually appealing maps of the entire world.

Azimuthal Equidistant Projection



Distortion:
Shape and **distance**
as one gets farther
from the center.

Used when drawing Polar maps.

Fuller Projection



Distortion:
Maintains the
accurate shape
and size but
rearranges
direction.

Peters Projection



Distortion:
Retains the **accurate size** of landmasses but **sacrifices shape**.

Often seen as a politically driven map.

U.S Land Ordinance of 1785

- Page 9




What is GPS?

“GPS or a **Global Positioning System** determines the precise position of something on Earth through satellites, tracking stations, and receivers.”



A satellite image of Earth showing a large hurricane over the Atlantic Ocean. The hurricane has a distinct eye and spiral cloud bands. The surrounding landmasses, including North and South America, are visible with green vegetation and white cloud cover.

What is remote sensing?



“**Remote sensing** is the acquisition of data about the Earth’s surface from a satellite orbiting the planet or from other long distance methods.”



What is GIS?



“GIS or a **Geographic Information System** is a computer system that stores, organizes, analyzes, and displays geographic data.”

