

Maps: Geography's Most Basic Tool

Map: a two-dimensional representation of the earth's features drawn on a flat surface.

- Maps help us visualize the shape of land masses and locate important global features.
- Using different types of maps, we can make connections between several concepts.

Cartography: the study and practice of making maps.

Map Projections

Map Projection: When features of the globe are transferred onto a flat surface

-It is very difficult to project the globe on a flat surface – every projection will have distortions

-When looking at a map projection, there are **4** key factors to compare:

1. Size (Area)- the areas represented on the map are proportional to their area on the earth
2. Shape - the shapes of places are accurate
3. Distance - measured distances are accurate
4. Direction - angles of direction are portrayed accurately

Types of Map Projections

Mercator Projection: map projection that uses a grid to assist in nautical navigation

- developed in 1569 by Gerardus Mercator
- was widely used on wall maps, atlases, books, etc. until the 1990's
- It is a poor projection because of distortions of distances, areas, landmasses and oceans
- Google Maps uses this projection

Gall-Peters Projection: an equal-area map, where all areas have correct sizes relative to each other

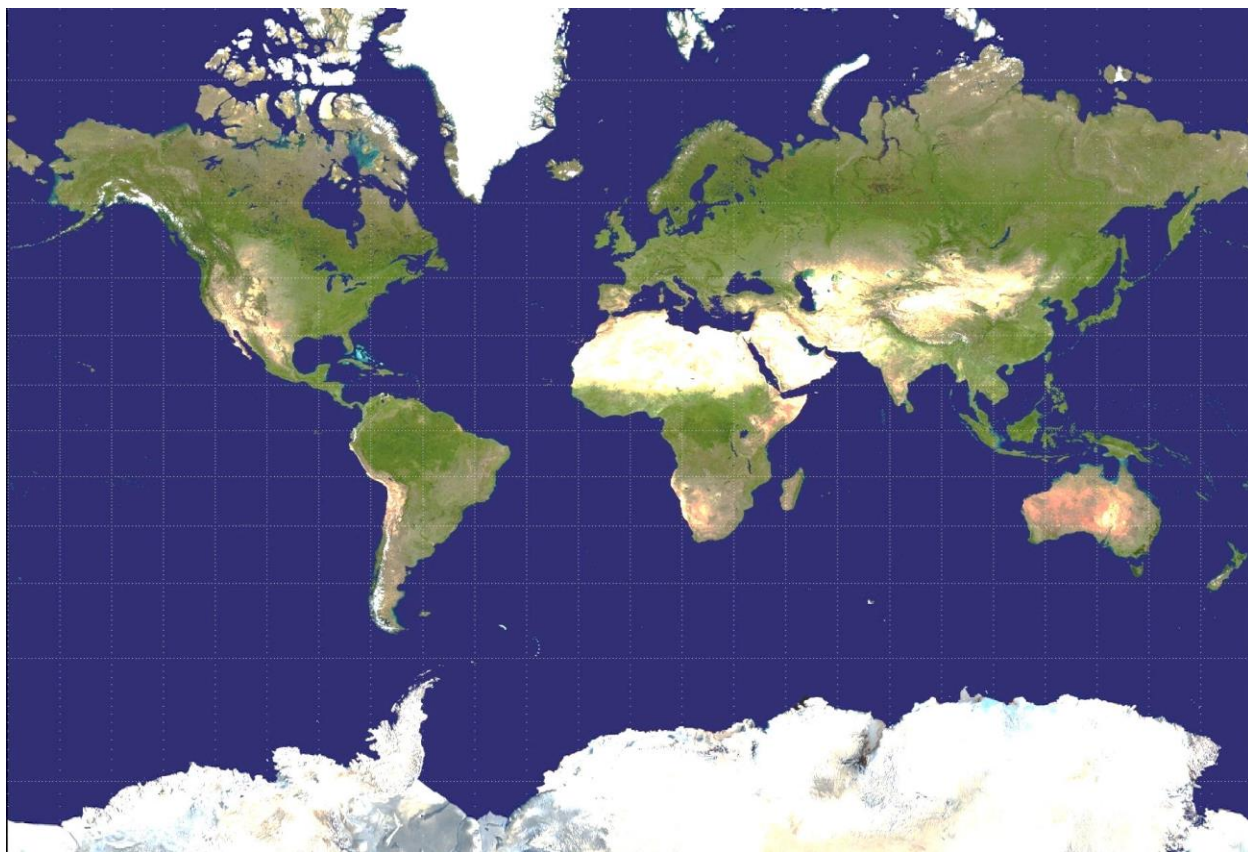
- Developed in 1885 by James Gall and Arno Peters

Winkel Tripel Projection: best map projection for providing a balance between size, shape, distance and direction

- Developed by Oswald Winkel in 1921
- the most widely used projection in the world



Mercator Projection Map



Gall-Peters Projection Map

