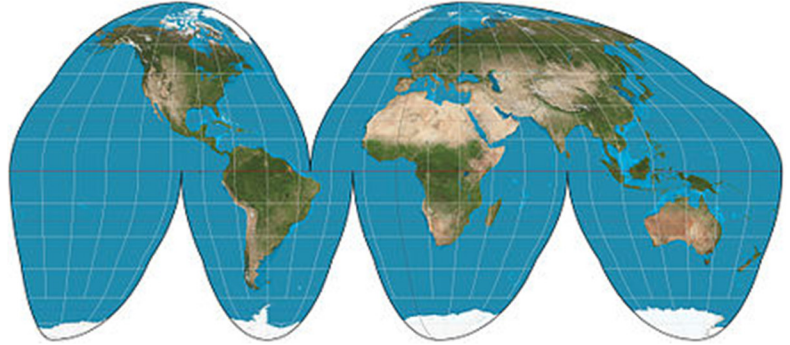


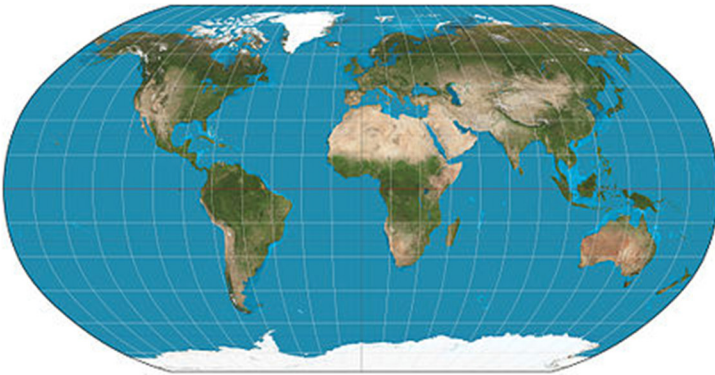
Looking at Map Projections

When you take an image of the Earth and flatten it, big gaps open up, big gaps open up. To fill in the gaps, mapmakers stretch parts of the earth. This often causes **distortion in** the maps. They show either the correct shapes of places, or their correct sizes. It is impossible to show both.



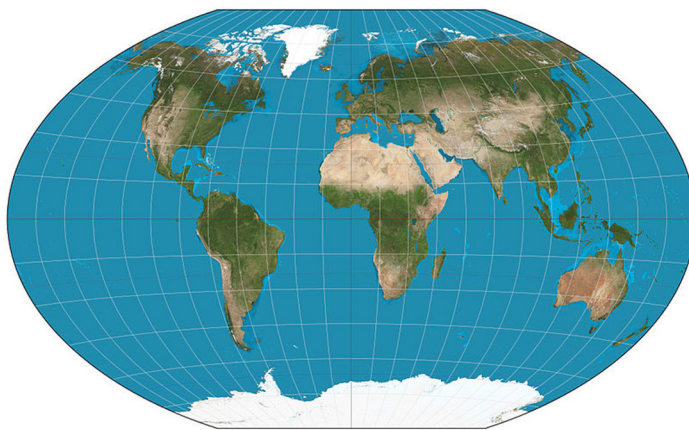
Goode's Interrupted Equal Area Projection
(Realistic representation of continent's size, shape)

As a result, **cartographers** use different map projections depending on their goals.



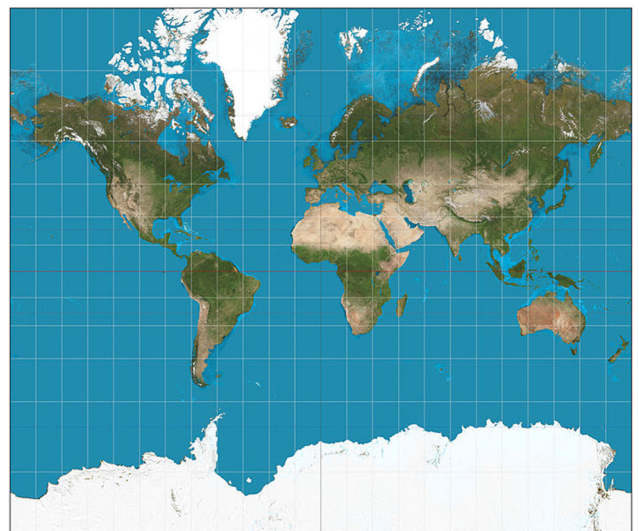
Robinson Projection

(More realistic picture of land size & shape- North and South Poles distorted)



Winkel Tripel Projection

(Land areas most closely resemble globe model)



Mercator Projection

(Land size & distance distorted)

Analyzing Map Projections

Look carefully at the four map projections on Attachment C to answer the following questions:

How does the shape of Greenland differ in the four projections?

How does the size of Greenland differ in the four projections?

How does Africa differ in the four projections? Australia?

Why do you think the continents have different sizes, shapes and positions in the different projections?

What other differences do you see on the different projections?

What is the main difference you see between the Robinson Projection and the Winkel Triple Projection?

Which projection do you think is the most accurate? Why?
