

4 Studying Geography Introduction to Mapping

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Geographers' Tools

TOPICS in "INTRODUCTION TO MAPPING"

- Cartography
- Location Systems
- Maps and their Parts
- Remotely Sensed Information
- Automated Cartography (mapping by software)
- Geographic Information Systems (GIS)

EXAM 1 follows this section

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Geographers' Needs

When studying the earth we need to be able to do three things:

1. **Collect data** (tools)
2. **Locate data** (grid)
3. **Portray data spatially** (maps that are made using cartographic techniques)

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The Map

The map is our special tool because it:

1. Gives a wealth of **information** at a glance
2. Shows **relationships** between locations and places.
3. Can be used to **influence** people by its visual components.

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Cartographic Terms

❖ Map

A view of the earth or a portion of its surface drawn to scale (proportion) on a flat surface.

❖ Cartography

The art and science of map making.

❖ Atlas

A collection of maps.

❖ Globe

Spherical-shaped map or model of the earth.

❖ Thematic map

A cartographic representation of a particular subject; a special-purpose map.

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Cartographic Terms

❖ Cartogram

A map that uses data other than land surface to portray the size of an area.

❖ Mental map

A map drawn from memory representing a person's perception of an area.

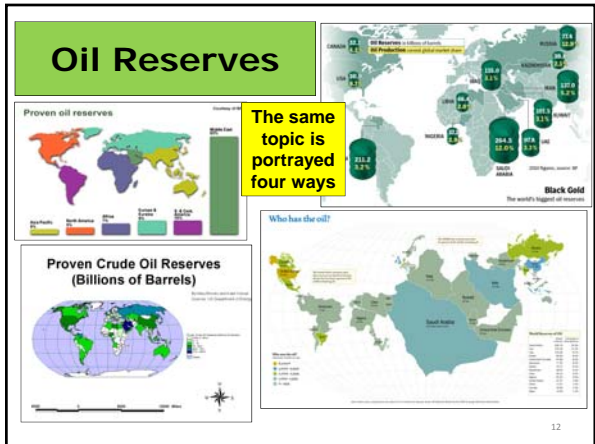
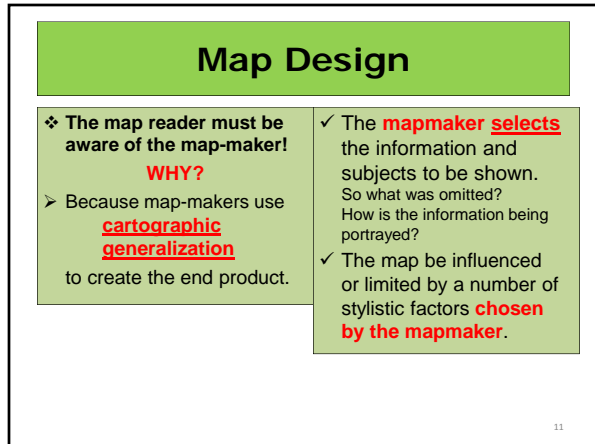
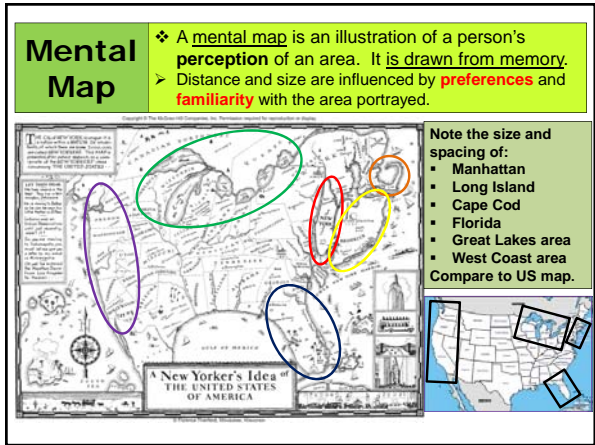
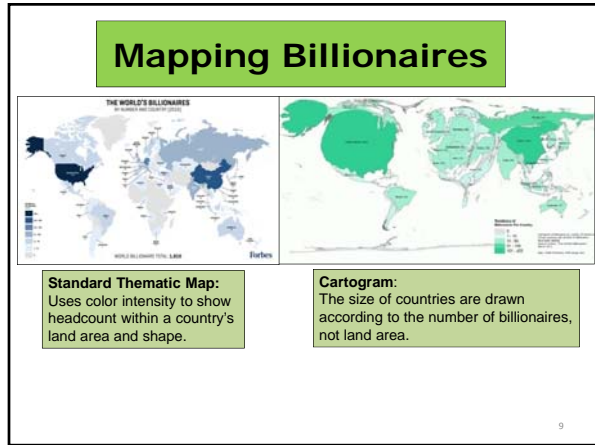
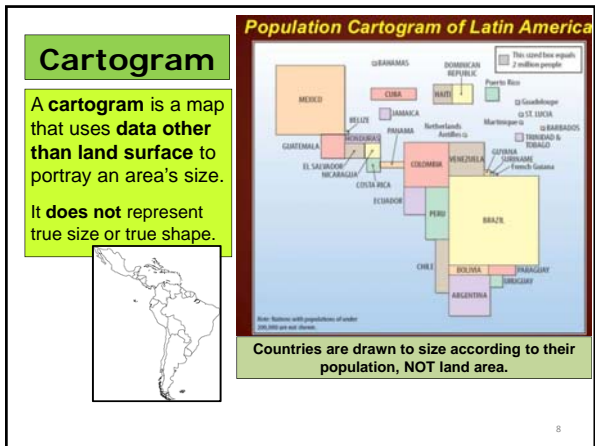
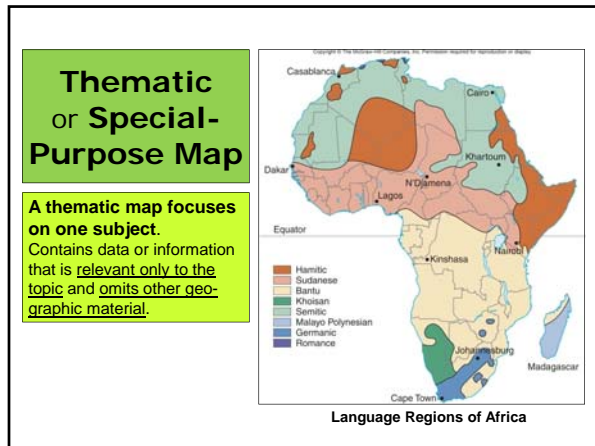
❖ Cartographer

Mapmaker; **portrayer of information**. Selects the information to be shown and decides how it will be portrayed on the map.

❖ Reader

YOU, the interpreter of the information. You must be aware of the mapmaker's options.

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Cartographic Variables

1. **Scale:** The ability to show detail.
2. **Technology and Skill:** The ability to present detail.
3. **Data:** How accurate and reliable is it?
4. **Purpose:** What is the theme, goal or end-result of drawing this map?
5. **Psychology:** Use of leading colors, patterns, symbols and categories.
 - Are they **eye-catching** or **eye-avoiding**?

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Cartographic Generalization

- ❖ **Simplification** – omitting details
- ❖ **Classification** – grouping
- ❖ **Symbolization** – use of shapes, colors, patterns to represent information
- ❖ **Induction** – portrayal of generalized information between points of reliable and accurate information.

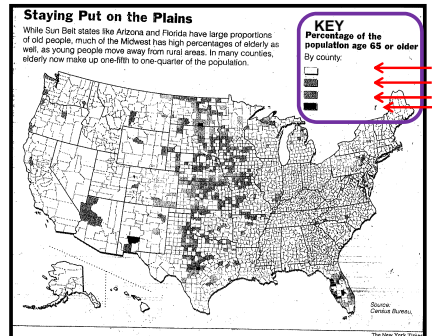
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Cartographic Authorship

- **Compilation:**
Who is putting the data together?
- **Publishing:**
Who is responsible for getting it out to the public?

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Cartographic Grouping



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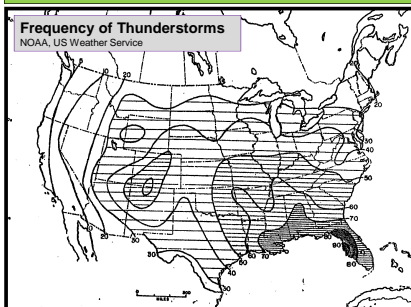
Lines on the map connect points of equal value.

Thunderstorm data comes from weather recording stations which are scattered around the country.

Accurate data is only for the location of the weather station.

We need to induce (i.e., guess) the frequency in areas where there are no instruments.

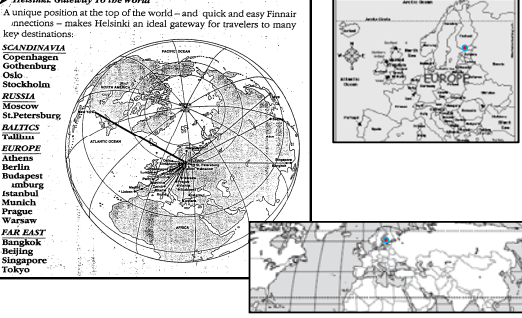
Cartographic Induction



Authorship: Advertising - Selling Airline Seats

► Helsinki Gateway To the World
A unique position at the top of the world – and quick and easy Finnair connections – makes Helsinki an ideal gateway for travelers to many key destinations:

- SCANDINAVIA**
Copenhagen
Gothenburg
Oslo
Stockholm
- RUSSIA**
Moscow
St. Petersburg
- BALTICS**
Tallinn
- EUROPE**
Athens
Berlin
Budapest
Frankfurt
Istanbul
Munich
Prague
Warsaw
- PAK EAST**
Bangkok
Beijing
Singapore
Tokyo



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Authorship: Advertising - Selling Theme Parks

A World of Fun, Not a World Away.
No matter where you live or travel, there's a Six Flags near you!

REALLY???

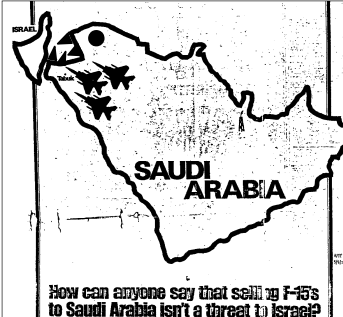
CLICK YOUR PARK!



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AUTHORSHIP: Point of View Map (propaganda)

Find at least 6 subliminal symbols on the map >>>>



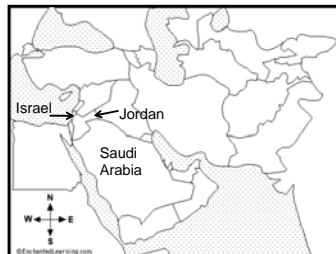
SAUDI ARABIA

How can anyone say that selling F-15's to Saudi Arabia isn't a threat to Israel?

Advertisement placed in the NY Times by the Israeli Right on 5/9/78 in an attempt to influence a US Congressional vote on selling fighter planes to Saudi Arabia.

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Outline Map of the Middle East



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NEXT

Location Systems

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