Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period# \_\_\_\_\_

Topic 1.1 – Introduction to Maps

1.1 Identify types of maps, the types of information presented in maps, and different kinds of spatial   
patterns and relationships portrayed in maps.

* 1.1.1 Types of maps include reference maps and thematic maps.
* 1.1.2 Types of spatial patterns represented on maps include absolute and relative distance and direction, clustering, dispersal, and elevation.
* 1.1.3 All maps are selective in information; map projections inevitably distort spatial relationships in shape, area, distance, and direction.

**TOPIC 1.1.1**

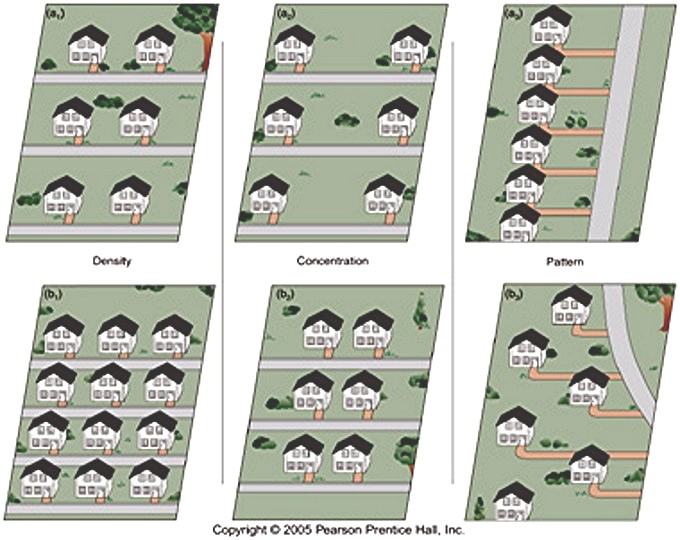
1. Reference Maps - general information/navigation/location
   1. Political - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Physical- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Road- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Thematic Maps- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - what is it like there?

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| **Examples of Thematic Maps** | **Definition** | **Image** |
| **Dot- Density** | \_\_\_\_\_\_\_\_\_\_\_\_ of a spatial characteristic. | The Functional Art: An Introduction to Information Graphics and  Visualization: The ambiguity of dot density maps |
| **Graduated/ Proportional Symbol** | \_\_\_\_\_\_\_\_\_\_\_\_ of  a variable. |  |
| **Cartogram** | \_\_\_\_\_\_\_\_\_\_\_\_. Area is distorted to show a variable. |  |
| **Isoline** | Use lines that connect points of equal value to depict variations in the data across space. |  |
| **Elevation** | **Elevation** shown through lines & their distance apart. |  |

**TOPIC 1.1.2**

|  |  |
| --- | --- |
| LOCATION | DISTANCE |
| 1. Absolute Location    * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    * \_\_\_\_\_\_\_\_\_\_\_\_\_\_    * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    * Rio de Janeiro is located at 23°S, 43°W. 2. Relative Location    * Relationship to another place    * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    * Between New York & Pennsylvania Ave. | 1. Absolute Distance  * EXACT, PRECISE * Miles/Kilometers/Feet * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   * Map Scale  1. Relative Distance  * Spatial Interaction: Connections, contacts, movement, and flow of things between places. * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   * I can order anything on Prime and have it delivered to my house in two days! |

1. Clustering
   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * Density - The # of something in a   
     defined area.
2. Dispersal/Distribution
   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * Distribution - The way something is   
     spread out over an area.
3. Pattern & Spatial Associations
   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

, associated, or correlated   
with one another.

**TOPIC 1.1.3**

Map Projection: The process of a cartographer (map maker) showing the curved surface of the earth on a flat surface (map).

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| Type of Map Projection | Advantages | Disadvantages | Image |
| Mercator | * \_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_ * Purpose: \_\_\_\_\_\_\_\_\_\_\_\_\_ * Preserves right angles of latitude and longitude. | * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   * Increases size of high latitude areas. |  |
| Gall-Peters | * Area of landmasses are accurate. * Repositions many countries to their rightful size. | * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ near the poles.   * Vertically stretched near the equator. |  |
| Robinson | * No major distortions * \_\_\_\_\_\_\_\_\_\_\_\_\_   \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |