

بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ

In the Name of Allah, The Most Gracious, the Most Merciful

KEY TERMS

- ★ **Physical Geography**: the study of the physical world
- ★ **Human Geography**: the study of the human world (ex. demographics)
- ★ **Scale**: a ratio used to measure something of the real world onto a representation
- ★ **Geographic System**: a set of geographic parts that form a whole
- ★ **Physical System**: a system that is physical in nature
- ★ **Human System**: a system that is human in nature

FOUR GEOGRAPHIC CONCEPTS

- 1) Spatial significance
- 2) Patterns and trends
- 3) Interrelationships
- 4) Geographic perspectives

FIVE CHARACTERISTICS OF SYSTEMS

**A system is a set of things that form a whole*

1. Size of parts vary
2. Purpose of parts vary
3. Importance of parts vary
4. Number of parts vary
5. Systems are interconnected

Ex of systems = TV system, water cycle, etc

TWO WORLDS

- a. The Natural World - rocks, plants, water, and animals
- b. The Human World - the human-created world

MAPS

- A map is a representation of the Earth's features drawn on a flat surface
- Maps use symbols and colors to represent features of an area

FEATURES ON A MAP

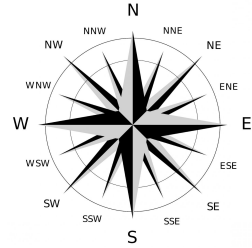
- Title**: identifies the area shown, topic, or purpose of the map.
- Legend**: explains the meaning of the symbols and colours on a map
- Scale**: represents the distance in the real world on a map
- Direction**: represented using an arrow
- Border**: separates the map from other information
- Date of Publication**: shows how recent the map is

TYPES OF MAPS

- **General Purpose Map**: drawn to scale using symbols and colours to represent major roads; includes major parks, hospitals etc.
- **Topographic Map**: indicates scale using symbols and colours for natural and human features on Earth's surface. Shows the Earth in lots of detail, indicates elevation, and shows major roads, settlements, mountains etc.
- **Thematic Map**: reveals geographic pattern of statistical data; focuses on one theme or topic (ex. population distribution)
- **Digital Map**: online, on computer devices, or handheld maps

COMPASS ROSE

A compass is used to find directions. There are four cardinal points (N, E, S, W) and twelve ordinal points (NE, NNE, ENE, NW, NNW, WNW, SE, SSE, ESE, SW, SSW, WSW)



SCALE

- **Large Scale Map**: show small area; a lot of detail; ex. topographic and road maps
- **Small Scale Map**: show large area; a little of detail; ex. globes and world maps

LINE ON EARTH

- ➔ **Latitude**: Imaginary lines that measure the distance north or south of the equator (0°). Lines are parallel to the equator and have an approximate interval of 111km.
- ➔ **Longitude**: Imaginary lines that measure the distance east or west of the Prime Meridian (0°). There is no fixed distance between the lines. The Prime Meridian runs through Greenwich, England. The International Date Line (180°) is the point where one day begins and one day ends.

GEOGRAPHY & TECHNOLOGY

- ❖ **GIS = Geographic Information System**: technology that manages and analyzes geographic knowledge. In other words, GIS is maps on computers. They determine where a location is and what it is. Each characteristic of the Earth is mapped as a layer. There are three ways of viewing a GIS:
 - **The Database View**: based on a database that describes the world in general terms
 - **The Map View**: show features and relationships on the earth's surface. Maps can be constructed to support editing of information. This is called **geovisualization**
 - **The Model View**: set of information transformation tools that create new geographic datasets from existing datasets. These are **geoprocessing** functions that take information from old datasets and apply them to analytic functions in the new datasets
- ❖ **GPS = Geographic Positioning System**: constellation of 24 spaced satellites that orbit the Earth and help people pinpoint their exact location. The three nearest satellites find location in a given radius. The point where these three satellites meet is the location being determined.
- ❖ **Aerial Photograph**: 3D images of the Earth using pictures taken by airplanes. Example of an aerial photograph is Google Earth.
- ❖ **Satellite Imagery**: images that are taken from satellites but show large areas with fewer details