Bellwork 8/30/2014

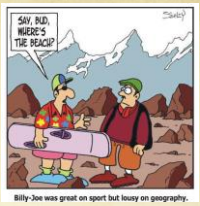
Instructions:

- Come in and gather your assigned materials on your desk. (If placed in bin already, please pick up)
  - Write your name on ***everything*** using a permanent marker on the supply table.
  - Place materials to the side of your desk
- Pick up **three** different colored sheets of paper from the supply table, as well as 1 3x5 notecard from the supply table.
- Please pick up a textbook and wait for bell.

Bellwork

- Copy today's HW into your agenda: Complete all ch. 1 vocab notecards for Thursday. (15 – please submit them inside a **ziplock bag** w/ your name on it)
- Please write "Geography" on the plain side in the center of your notecard, in large printed letters.
  - What do you *think* it means?
  - See pg. 5

Front of Flashcard	Back of Flashcard
WORD or CONCEPT	- a definition that makes sense to you - formulas needed - a diagram or example (if necessary) - any other important/useful information about the concept



Billy-Joe was great on sport but lousy on geography.

THE 5 THEMES OF GEOGRAPHY

ge·og·ra·phy

1 : a science that deals with the description, distribution, and interaction of the diverse physical, biological, and cultural features of the earth's surface

Source-Merriam Webster Collegiate Dictionary

IN PLAIN ENGLISH:

- Geography is the study of the earth and everything on it.

THE FIVE THEMES OF GEOGRAPHY

1. Movement
2. Regions
3. Human-Environment Interaction
4. Location
5. Place

Making a Flip Foldable – The Five Themes of Geography

- Students will create a flip foldable as an active way to review the Five Themes of Geography.
- Use 3 sheets of colored paper (different colors) and stack them so that about one inch of the paper is visible beneath each top sheet. (See picture #1)
- Fold the top down so that six stripes are visible – the center stripes will be the same color and staple at the top. (See picture #2)

Picture 1

Picture 2

Picture 3

- Once the foldable has been constructed, use the following labels (or students can create own labels) for each foldable tab. The labels (Tab 2-6) are placed in such an order so that students can use the acronym **MR HELP** to remember the five themes. (See Picture #3)
- Students will then take notes inside each corresponding tab. Notes can be taken while viewing and discussing the Five Themes of Geography PowerPoint lesson or the Five Themes Notebook handouts.

1. MOVEMENT

- How are people and places linked by communication and the flow of people, products and information/ideas?
  - Movement of **People**
    - Cars, Trucks, Trains, Planes
  - Movement of **Products**
    - Cars, Trucks, Trains, Planes
  - Movement of **Information/ideas**
    - Phones, computer (email), mail
    - TV, Radio, Magazines
    - Religion, technology

2. REGIONS

What are regions and how are they useful?

- **Regions can be defined on the basis of physical and human characteristics**
- **Geographers divide the world into regions to help them interpret information.**

3. HUMAN-ENVIRONMENT INTERACTION

- **How do people interact with and change their environment?**
  - **We depend on the environment.**
    - **Ex. People depend on rivers for water and transportation.**
  - **We adapt to the environment.**
    - **Ex. We adapt to the environment by wearing clothing suitable for summer (shorts) and winter (coats), rain and shine.**
  - **We modify the environment.**
    - **Ex. People modify their environment by heating and cooling buildings for comfort.**

4. LOCATION: Where is it? Why is it located there?

Absolute Location

- Is given in degrees of latitude and longitude (global location) or a street address (local location).
  - Paris, France is 48° North Latitude and 2° East Longitude.
  - The White House is located at 1600 Pennsylvania Ave.

Relative Location

- Relative location depends upon point of reference. Ex: Near, far, a short drive, around the corner…
- Described by landmarks, time, direction or distance. From one place to another.

5. PLACE: What is it like?

- **Physical Characteristics**
  - **Landforms (mountains, plains, etc.), bodies of water (oceans, lakes, bays, etc.), ecosystems (soil, plants, animals, and climate)**

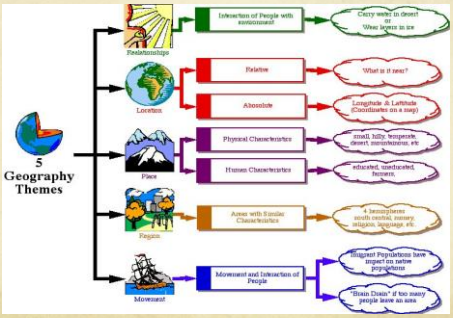
5. PLACE: What is it like?

- **Human Characteristics**
  - Bridges, roads, buildings, culture, languages, beliefs.
  - All places have features that distinguish them from other places.

REMEMBERING THE 5 THEMES

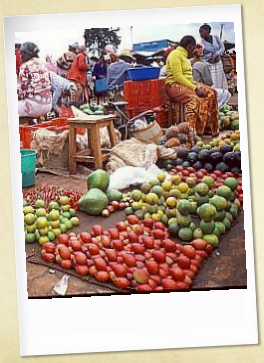
- If you can't remember what they are just ask MR. HELP!!!
  - ***M*** – Movement
  - ***R*** – Regions
  - ***HE*** – Human Environment interaction
  - ***L*** – Location
  - ***P*** - Place

SUMMARY CHART



PRACTICE: Discuss the 5 THEMES in this picture.

1. Location
2. Place
3. Human- Environment Interaction
4. Movement
5. Regions



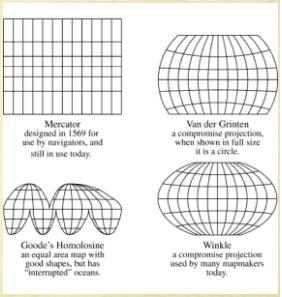
PRACTICE: Discuss the 5 THEMES in this picture.

1. Location
2. Place
3. Human-Environment Interaction
4. Movement
5. Regions

Section 2: The Geographer's Tools

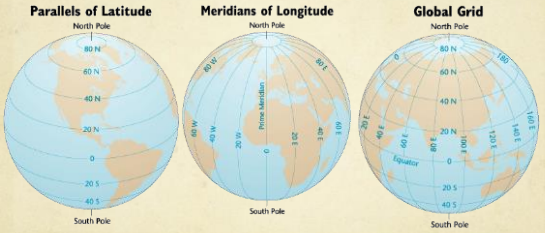
- **Globes and Maps:**
  - As people explored the Earth, they collected information about it.
  - **Mapmakers, called cartographers, wanted to present this information correctly.**
  - **The best way was to put it on a globe, a round ball that represented the Earth.**

- Because globes are not practical or easy to use to carry, flat maps were invented.
- However, the earth is round and a map is flat.
- Mapmakers had to find ways to make maps accurate.



How Latitude and Longitude Form the Global Grid

(Please Draw and label basic outline of the parallels and meridians)



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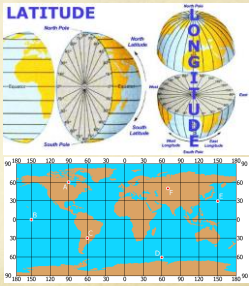
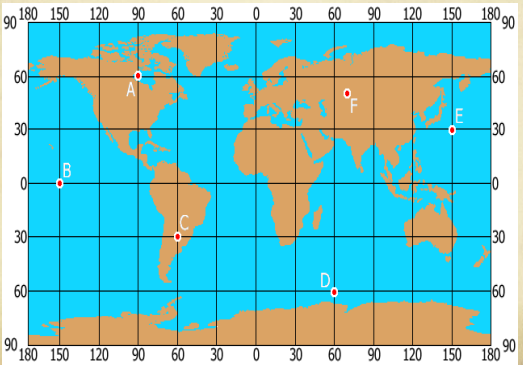
Longitude and Latitude

When given coordinates, you should be able to quickly and easily find a location.

- **Latitude** is the distance measured in degrees north or south of the Equator, or where the hemispheres meet.
- **Longitude** is the distance measured in degrees east or west of the Prime Meridian.
  - Latitude and longitude turn the earth into a grid, making it easy to determine absolute location.
  - (latitude, longitude)
  - Example: (42 N, -71 W) are the coordinates for Worcester, MA
  - Always go North or South of the Equator (Latitude) first, then East and West of Prime Meridian (Longitude)

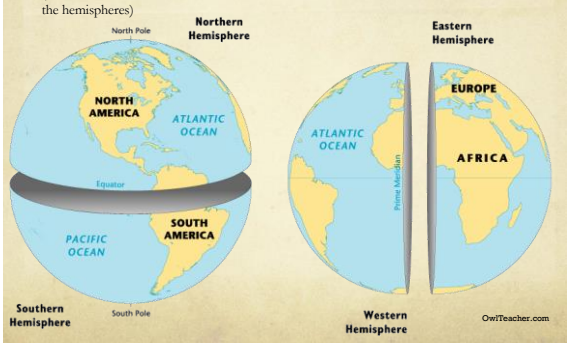


Please identify A-E – take 4 minutes and try your best!



The Hemispheres

(Please Draw and label basic outline of the hemispheres)



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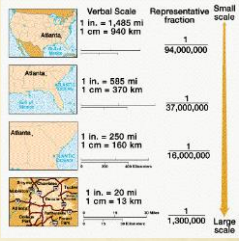
Globes and Maps

- The most accurate way to present information on the islands, continents, and bodies of water of the world is to put it all on a globe, a round ball like the Earth itself.
- The only difference between a globe and the Earth itself is the scale, or size, represented on the globe.



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- Globes have a disadvantage: They cannot be complete enough to be useful and at the same time be small enough to be convenient.
- Therefore, people invented flat maps.

- Maps try to show the Earth, which is round, on a flat surface.
- This causes distortion, or a change in accuracy of the shapes and distances of places.
- It is impossible to show the Earth on a flat surface without some distortion.

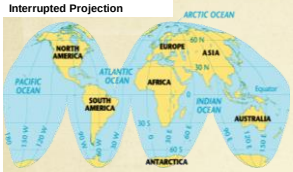
Getting It All On the Map

The World: Mercator Projection

- In 1569, a geographer named Gerardus Mercator created a flat map to help sailors navigate long journeys across the globe.
- The **Mercator projection, or method of putting a map of the Earth onto a flat piece of paper**, is used by nearly all deep-sea navigators.
- The Mercator projection is a conformal map, meaning that it **shows correct shapes, but not true distances or sizes.**
- There are many types of other projections of the globe.

The World: Three Projections

Interrupted Projection



There are many ways to show a globe on a flat map. The interrupted projection map, on the left, shows real sizes and shapes of continents. The equal area map , below left, shows size accurately. The Peters projection, below, shows land and oceans areas and correct directions accurately

Equal-Area Projection

Peters Projection

The World: A Robinson Projection

The Parts of a Map

Compass Rose

- A compass rose is a model of a compass. It tells the cardinal directions, which are north, south, east, and west.

Scale

- The scale on a map tells you the relative distance on the map to the real world. For example, a map's scale may tell you that one inch on the map equals one mile in the real world.

Key

- The key, or legend, on a map explains what the symbols on a map represent, such as triangles representing trees.

Grids

- Some maps use a grid of parallels and meridians. On a map of a small area, letters and numbers are often used to help you find your location.

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The Science of Mapmaking

- **Surveying**: the process of observing, measuring and recording what is in a specific area
  - Today, most surveying is taking my remote sensing, gathering geographic info w/ photography and satellites
- **Landsat**: series of satellites that orbit more than 100 miles above earth
  - Landsat can scan the entire Earth in 16 days
  - Geostationary Operational Environment Satellite (GOES) is a weather satellite
- **Geographic Information Systems (GIS)**: Digital database of information about the world
  - Satellite info, aerial photos, maps, diagrams
- https://www.youtube.com/watch?v=Spel7vfkpNc