Directions: Follow the common directions distributed to you for "guided reading" assignments.

Rubenstein Ch 1 p 4 – 7 (Key Issue 1.1: Geography's Basic Concepts and Mapping)

1. What is the etymology (how the word came to be) of "geography" *from ancient Greek, Geo="earth" and graphy = "to write". Therefore "to write/describe the Earth"*

2. What are the two simple questions that human geographers ask?
   a. *where are people and activities found on Earth.*
   b. *Why are they found there.*

3. While historians organize material chronologically (over time), geographers organize material how? *spatially*

4. What three basic concepts help geographers explain why different locations are interrelated?
   a. *scale is the relationship between the portion of Earth being studied and Earth as a whole. (local to global)*
   b. *space refers to the physical gap or interval between two objects.*
   c. *connection refers to relationships among people/objects across the* ^(barriers of space)

5. What is a map? *a two-dimensional or flat scale of the Earth's surface or portion of it.*
   a. Describe the two purposes for which a map can be used (for this class "ii." is much more important).
      i. *as a reference tool. shortest route, where a location is?*
      ii. *as a communication tool. To depict the distribution of human activities or physical features.*
         • What term does de Blij use for this type of map (de Blij p 16)? *thematic map*
      b. What do we call the science of mapmaking? *Cartography*

6. Read "Geography in the Ancient World" and "Geography's Revival". This is background on the development of geography as a science but you shouldn't be tested on it during the AP exam.

Rubenstein Ch 1 p 8 – 11 (Key Issue 1.1: Contemporary Geographic Tools and Making Maps)

7. What does a GIS (geographic information system) do? *captures, stores, queries and displays the geographic data*. Information in GIS is stored in (not "computers") *layers*
   a. What is GISci? *is the analysis of data about Earth acquired through satellite and other electronic information technologies.*
   b. (page 9) What is a mashup? *map that overlays data from one source on top of a map provided by a mapping service*
   c. What is remote sensing (in general)? *the acquisition of data about Earth's surface from a satellite orbiting Earth or from other long-distance methods*
      i. (lecture/discussion) Besides satellites, what might be other tools used in remote sensing? _____
      ii. (lecture/discussion) Why might a geographer use remote sensing? _____

8. What does GPS stand for? *Global Positioning System*
   a. What provides GPS with its info? *Satellites*, What is GPS most commonly used for? *Navigation*
   b. What is geotagging? *identification and storage of info by its longitude & latitude.*

9. What concept determines the amount of area covered on a map and the level of detail provided? *map scale*

10. Three ways that this concept can be expressed are:
    a. *ratio* or *fraction* What is represented by the denominator (on the right) in this type of representation, the distance "on the map" or "on the Earth's surface"? *"on the Earth's surface"*
    b. Scale reflected in words is called a *written* scale. Create this type of scale for the ratio scale of 1:300 in inches to miles. *1 inch of the map is equal to 300 miles on the Earth's surface*
    c. What is a graphic scale? *bar line marked to show the distance on the Earth's surface*

    To be completed during lecture/discussion (circle correct choice):
    1 inch/3 miles = (small or ⟨large⟩) scale = (⟨small⟩ or large) area = (⟨more⟩ or less) detail
    1 inch/3,000 miles = (⟨small⟩ or large) scale = (small or ⟨large⟩) area = (more or ⟨less⟩) detail

11. What is "projection"? *scientific method of transferring locations on Earth's surface to a flat map*
    a. What do all map "projections" create which makes them inaccurate? *distortion*
    b. What four types of distortion result from projections?
       i. *shape* ii. *distance* iii. *relative size* iv. *direction*

c. Equal area projection (also called _Winkel-Projection_). See Figure 1 - 17

Benefits:	Distortions:
1. maintains relative size	1. Greenland, Australia more distorted but sparsely inhabited.
2. minimizes distortion in the shapes of most landmasses.	2.

Describe the advantages and disadvantages of the following projections (Examine the projections in figures 1-18, 1-19 and 1-20 and be able to visually differentiate between Mercator, Goode-Homolosine and Gall-Peters projection.):

Projections	Advantages	Disadvantages
Mercator	shape is distorted very little direction is consistent	relative size is grossly distorted high latitude places look much larger
Goode-Homolosine	more prominence to land-masses	(lecture) interruptions distort direction and distance
Gall-Peters	relative size is not distorted.	shape is distorted

12. (lecture) How can these projections be divided into two categories based on what they are trying to emphasize?
   a. conformal - maintains shape at expense of size
   b. equal area - maintains relative size at expense of shape.

Rubenstein Ch 1 p 12 – 15 (Key Issue 1.1/1.2: Interpreting Maps and Place: A Unique Location)

13. Read "The Geographic Grid". These concepts will be taught and reinforced through a packet of worksheets.
   Print/complete the "latitude and longitude" exercises (8 pgs) posted under Unit 1 on my website. See due date on schedule.
   After these have been graded and returned to you, make sure you study them before the unit exam.

14. Complete the chart below for the five types of thematic maps your book provides:

Map type	Description	Lecture notes (leave blank):
Isoline	connects with lines all places that have particular values	Figure 1-23 = bad example = isopleth → elevation, barometric pressure
Dot distribution	shows how points are clustered or spread out over an area	John Snow cholera map. where did it happen. Investigate thing that don't fit.
Choropleth	recognizable areas are shaded or patterned in proportion to measurement	must consider level of aggregation/generalization
Graduated symbol	displays symbols that change in size according to a variable	"singles". use key/legend to understand symbols/coloring
Cartogram	size of a country or state is proportional to a value	Electoral college examples. Retention of map shapes allows easy recognition

15. (de Blij Ch 1 p 11 – 13 stop at "Cultural Landscape") What spatial perspective was introduced by four major geographical organizations and published by the National Geographic Society in 1986? _Five themes of geography_
   What are the five themes of geography?
   1. location - where is someplace? Most basic question
   2. human - environment interaction How do people change environment / how does environment change people
   3. region - what are similarities between places
   4. place - how can a place be described physically/by people '4.
   5. movement - how is a place affected by the movement of people, goods and ideas

16. (Rubenstein p. 14) What term refers to the position that something occupies on the Earth's surface? _location_
   ** (keep in mind that, although not the focus of this course, this is the most fundamental/foundational concept in geography).
   a. What is a toponym? _the name given to a place on Earth_
      i. What are some characteristics of a location that toponyms can give clues about? _origin of its settlers, physical environment_
   b. What is the "site" of a location? _physical character of a place. Important characteristics incl. climate, water sources, topography, soil, etc._
      i. (lecture) _A basic description, objective, no judgement description_
   c. What is the "situation" of a location? _based on its role in a larger surrounding context. can change with time._   [margin: Switch to de Blij →]
      i. What is a relative location? _location of a place through association with another_
      ii. What is an absolute location (include an example of a common way to express this idea)? _exact location. Usually expressed with coordinates of longitude and latitude._

[margin bottom left: explains connections, importance of a place]

iii. Why is "situation" a valuable way to indicate location?
- finding an unfamiliar place by comparing it location with a familiar one.
- understanding the importance of a place. How accessible is it? What advantages does the site convey ✓

Rubenstein Ch 1 p 16 – 19 (Key Issue 1.2: Region: A Unique Area and Regions: Geography and Culture)

17. What is a region? an area of the Earth distinguished by one or more distinctive characteristics

18. A cultural landscape combines what three types of features (incl. examples)?
   a. cultural features - such as language & religion
   b. economic features - agriculture and industry
   c. physical features - climate and vegetation
      i. What U.S. geographer defined the cultural landscape as an area fashioned from nature by a cultural group? Carl Saver
      ii. (de Blij p 14) What is sequent occupance? sequential imprints of occupants, whose impacts are layered one on top of another, one impacting the next.

19. Summarize below the three basic types of regions (ALSO read de Blij p 23- 28 to supplement Rubenstein's description):

Type	Synonym(s)	Definition	Examples
Formal	uniform	an area where everyone shares in common one or more distinctive characteristics present throughout	common language econ.→ type of crop environment → climate
Functional	nodal	organized around a focal point. characteristic at center diminishes in importance outward	transportation system TV station reception area
Vernacular	perceptual	in area people believe to exist as part of their cultural identity. *What is a mental map (p 9)?* a personal representation of ~~the~~ a portion of Earth's surface. *(de Blij p 17) What is activity space?* places we travel routinely in our rounds of daily activity	"Midwest", "south" directions to a party/store commuting zone

20. How do geographers define culture? body of customary beliefs, material traits and social forms that together constitute a distinct tradition of a group of people
   a. (de Blij p 28) How does de Blij define culture? an all-encompassing term that identifies not only the tangible lifestyle but prevailing values and beliefs
      i. What is a single attribute of a culture? culture trait
      ii. What is a unique combination of cultural traits called? culture complex
      iii. What is independent invention? a trait that develops in more than one hearth without being influenced by its development elsewhere.
      iv. What do we call restrictions that reduce the spread of ideas or innovations? cultural barriers
21. What is spatial association? when the distribution of one feature is related to the distribution of another feature

Rubenstein p 20 – 23, 32 (Key Issue 1.3: "Scale: Global to Local" and "Space: Distribution of Features" and "Connections: Spatial Interaction")

22. What mathematical term defined earlier can ALSO mean the size across which something is being analyzed? scale
   a. Give some examples of different analysis sizes local, global
23. (lecture) The scale on which data is compiled and analyzed can vary. This spatial relationship between data and area can be defined as level of aggregation or (de Blij p 17) generalization
   (leave blank for lecture details) on a thematic map, data can be "aggregated" across different size units. Determining the proper level or generalization. Refer to map aggregated at state vs. county level

24. What is globalization? a force or process that involves the entire world and results in making something worldwide in scope.
   a. What effect has globalization had on the scale of the world? the scale of the world is shrinking in the ability of something to interact w/ something in another place
      i. (skip to p 32) What is distance decay? the farther away you are the less likely the two are to interact. contact diminishes with increasing distance.
      ii. What is space-time compression? the reduction in the time it takes for something to reach another place.
         (hugely affected by technology)

s/b in red →

ex for population density which is more appropriate

iii. What is a network? *chain of communication that connects places*

b. (back to p 21) What entities have been the leaders of economic globalization? *transnational corp.*
   i. also known as *multinational corps.*

c. (de Blij Ch 1 p 8) What is de Blij's definition of globalization? *a set of processes that are increasing interactions, deepening relationships and accelerating interdependence across national borders. Outcomes unevenly distributed*

25. (Rubenstein p 22) What is distribution? *the arrangement of a feature in space.*
   a. What are the three main properties of a distribution?

Property	Definition	Key terms (lecture)
Density	frequency with which something occurs in space.	arithmetic/population physiological, agricultural
Concentration	the extent of a feature's spread over space	clustered vs. dispersed Agglomerated v. scattered
Pattern	geometric arrangement of objects in space	linear, circular, rectangular no pattern = random "irregular"

Rubenstein p 24, 39 (Key Issue 1.3: "Geographic Thought" and "Cultural Ecology")

26. Define the following approaches geographers take to cultural identity and space:
   a. Poststructuralist *how the powerful in society dominate, or seek to control, less powerful groups, how the dominated groups occupy space and confrontations that result from the domination.*
   b. Humanistic *emphasizes the different ways that individuals form ideas about place and give those places symbolic meanings*
   c. Behavioral *the importance of understanding the psychological basis for individual human actions in space.*

27. (p 39) What is cultural ecology? *the study of human-environmental interactions*

28. What two German geographers urged human geographers to adopt the methods of scientific inquiry used by natural scientists? *Alexander von Humboldt* and *Carl Ritter*
   a. They theorized that the physical environment caused social development. This theory is known as *environmental determinism*
      i. (Read de Blij p 32 – 33, "Rejection of Environmental Determinism") Besides development what do environmental determinists believe is strongly affected or even controlled by the environment? *human behavior (either individually and collectively.)*
   b. (lecture) How do modern geographers regard this theory, why? *racist b/c it was used to exert European superiority and the inferiority of other races.*
   c. What is possibilism? *the physical environment may limit some human actions but people have the ability to adjust to their environment.*
      i. (de Blij p 33) Interest in what area of inquiry has supplemented cultural ecology? *political ecology*
      ii. (de Blij p 33) With what is this area fundamentally concerned? *the environmental consequences of dominant political-economic arrangements*
         • This is linked to what geographic thought above? *poststructuralist.*

Sustainability also affects this →

Rubenstein p 30 - 31 (Key Issue 1.3: "Connections: Diffusion")

29. What is diffusion? *the spread of ideas, people, or goods across space*
   a. What is a hearth? *place from which an innovation originates*

30. Complete the following chart detailing the different types of diffusion

Type	Definition	Subtype	Definition *#s stay the same, just move*	Examples (lecture)
Relocation	*the spread of an idea through the physical movement of people from one place to another*			*Spanish language in Pilsen*
Expansion *the spread of a feature in an additive process* *snowballing #s grow*		Hierarchical	*spread of an idea from persons or nodes of authority or power to other places of people. flows between connected*	*HIV/AIDS. fashion missionary story Hip hop*
		Contagious	"spreads like a disease" rapid widespread, outward from hearth in all directions	*Rebecca Black "Friday, Friday*
		Stimulus	*the spread of an underlying principal even though the characteristic itself fails to*	*Mahabarahta burger missionary story*

Rubenstein p 34 - 38 (Key Issue 1.4: "Sustainability & Resources", "Sustainability & Earth Systems", "Geography & Ecology", "Sustainable and Unsustainable Ecosystems")

31. What is a **resource**? ~~substance~~ a substance in the enviroment that is useful to people economically and technologically feasible to access and socially acceptable to use.
    a. Into what two categories can resources be divided? Define.
        i. renewable - produced in nature more rapidly than consumed by humans
        ii. non rewable - produced more slowly in nature than consumed by humans
32. What is **sustainability**? use of Earth's resources in ways that ensure availability in the future.
    a. In what two ways are the sustainability of resources damaged by human actions?
        i. humans deplete nonrenewable resources - petrol, nat gas, coal
        ii. humans destroy resources through pollution of the air water & soil.
33. What are the **three pillars of sustainability**?
    a. Environment
        i. What is conservation? (Sustainable) use and management of Earth's natural resources
        ii. How does preservation differ from conservation? preservation is the maintenance of resources in their present condition w/as little human impact as possible
    b. Social Pillar _____ (discuss in class)
    c. Economic Pillar _____ (discuss in class)
34. Define the Earth's four physical systems:
    a. atmosphere - thin layer of gases surrounding Earth
        i. What is **climate**? long-term average weather conditions at a location
        ii. What German climatologist classified the Earth into five main climate zones? Köppen
        iii. What are those zones? A) Tropical   B) Dry   C) Warm mid-latitude   D) Cold mid-latitude   E) Polar
        This concept is closely related to the latitude exercises from #27, recognize this connection.
    b. hydrosphere - water in oceans, lakes, & river & groundwater in soil & rock
    c. lithosphere - crust of the Earth and part of its mantle.
        i. What types of maps show details of the Earth's topographic
    d. Biosphere - all living organism on Earth, incl. plant/animals/microorganisms
        i. What is an ecosystem? a group of living organisms and they abiotic spheres which they interact with.
35. Read p 40 – 41 "Sustainable and Unsustainable Ecosystems" (we will be discussing these concepts in class)

Rubenstein Ch 10 p 354 – 355 (Development & Geography)
36. What is **development**? the process of improving the conditions of people through the diffusion of knowledge and technology
    a. How does the UN define this concept? the process of enlarging people's ability to lead a long/healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living
    b. Into what two categories are countries grouped according to development, include the **acronym version**?
        i. developed country (AKA more developed country or MDC) UN = very high developed country.
        ii. developing country (aka less developed country or LDC). has made some progress but less than MDC. UN divides them into high, medium and low develop
37. What did the UN create to determine the level of development in countries? Human Development Index
    a. What three general factors does the UN consider in arriving at this measurement?
        i. decent standard of living
        ii. long and healthy life
        iii. access to knowledge.
38. Using the information found in on pages 356 – 361 complete the graphic organizer on the next page to understand the items used to calculate the HDI.

Rubenstein p 362 – 369 ("Unequal & Uneven Development", Inequality within Countries", "Gender Inequality" and "Gender Empowerment & Employment")
39. What has the UN created to measure the extent of inequality within a country? Inequality -adjusted Human Development Index (IHDI)
    a. **(lecture)** What coefficient is used to adjust HDI to IHDI? GINI coefficient

Read the Wallerstein article posted on my website for a fuller understanding of this theory
40. What theory was proposed by Immanuel Wallerstein? WORLD-SYSTEMS THEORY

a. What two categories did Wallerstein use to describe the relationship between developed and developing countries? __"Core" and "periphery"__

b. What additional category has arisen since the original formation of this theory? __semi-periphery__

c. **(lecture)** We will complete the chart below regarding world systems theory in class together!

	Core	Semi-periphery	Periphery
Characteristics	high tech, educ. and skill generates high inc. high HDI dominates/exploits other tiers	NO semi-periphery processes. PLACE w/ mix of core and periphery processes in same place.	low tech, educ. & skill generates low inc. low HDI. is exploited by other tiers.
Processes (reflect characteristics, can serve as examples)	Q jobs w/examples - Corp. headqtrs. (global) decision-making / CEOs - intellectual property - STEM jobs/research High tech secondary (solar panels, comp chips, autos)	Both processes occur in these societies often rural-urban w/ mix of both semi-p dominates secondary!	- primary jobs (raw mat'l extraction by hand) - mining - subsistence farming Low-tech secondary (textiles)
Where?	US/Canada, W.Euro. Japan/Australia	China, India, Mexico Brazil, S. Africa (BRICs) E.Euro/Russia Saudi Arabia often large area/pop.	Sub-Saharan Africa Interior SE Asia Central-South Asia Interior Latin America (Bolivia, El Salvador Honduras, Guatemala)

41. How is inequality reflected in other than a national scale, describe? __it can be seen through differences in GDP per capita among states/provinces within countries. Also can be seen in contrasts among neighborhoods within the largest cities of developing countries (LDCs)__

42. **GII** stands for the __Gender Inequality Index__ which is based in three factors:

   a. __Reproductive Health__ (**skip to p 370** to see how this is determined, incl. whether high or low measurements indicate more or less gender equality)

   i. Adolescent Fertility Rate (AFR) = __is the # of births/1,000 women aged 15 to 19. 48 in LDCs, <10 in MDCs, low due to contraceptives 21 in USA, 110 in sub-Saharan Africa__

   - This correlates with the use of what? __contraceptives.__

   ii. Maternal Mortality Ratio (MMR) = __# of women who die giving birth per 100,000 live births, 16 in MDCs, 171 in LDCs highest rates in sub-Saharan Africa__

   b. __EMPOWERMENT__ (**skip to p 368, 369** to see how this is determined)

   i. __% of seats held by women in the nat'l legislature__

   - Overall what global region has the highest % of women serving in legislatures? __Europe__

   ii. __% of women who have completed some secondary (high) school__

   - Where is the gender gap in secondary school attendance especially high? __South Asia__

   c. __Female labor force part.__ (**skip to p 369**)

   i. What % of women hold full-time jobs outside the home globally? __49__ % men __15__

43. What numerical scale is GII measured across? __zero to one__

   a. Lower = __greater equality = zero: men and women treated equally__

   b. Higher = __greater inequality = women fare poorly__

   c. How is this distributed between LDCs and MDCs? __.468 - LDCs vs. .170 - MDCs.__

   i. What global region has seen the greatest improvement in GII since the 1990s? __SW Asia & N. Africa__

   d. How does the US compare to other developed countries? Why? __ranked 36, has a higher AFR and MMR. It also has less women in the legislature than other high MDCs__

44. What is the Gender Development Index (GDI)? __Measures the level of achievement in HDI categories but compares men and women__

Human Development Index

Factors	Indicators		Define/Notes	MDC vs. LDCs (provide statistical ranges, benchmarks, trends)
Decent Standard of Living (Economic) (p 356 – 357, 361)	Gross National Income (per capita)		value of the output of goods, services produced in a country in a year; incl. money that leaves and enters; made to GNI to account for difference in the cost of goods	US GNI $60K, MDCs $44K, LDCs - $12K; *average over the entire population*; Understand what "per capita" means
			What is PPP? an adj. made to GNI to account for difference in the cost of goods	What does GNI tell us and not tell us? (average) it does not measure the distribution of wealth
			What measure do some other studies use? Gross Domestic Product - value of output of goods & services produced in a year.	
	Economic Structure (Types of Jobs)	Primary	activities that directly extract materials from Earth: agriculture, mining, fishing and forestry	% GNI decreased in developed but > developed; MDCs: low agricultural density
		Secondary	mfrs: manufacturers that process, transform and assemble raw materials into useful products	% GNI decr. in MDCs < LDCs
		tertiary *see notes for tertiary Qs.	proportion of goods and services (exchange for payment: retail, law, banking, education, government)	% GNI high in MDCs, growing in LDCs
	Productivity		value of a particular product compared to the amount of labor needed to make it.	higher in MDCs b/c more access to machines, tools & equipment; LDCs lower b/c they rely on human and animal power
	Consumer Goods (take from p 361)		especially important are goods related to transportation and communication; incl. motor vehicles, telephones, and computers	motor vehicles 183/1000 world, 580 MDCs, 102 LDCs; cell phones 1046/1000, 1200 MDCs, 1000 LDCs; internet users 500/1000, 900 MDCs, 408 LDCs; essential in MDCs, not essential in LDCs
Access to Knowledge (Social) (p 358 – 359)	Years of schooling		<u>Years of Schooling</u> Avg. # of yrs. adults 25 and older have gone to school; "Expected" Years of Schooling Avg. # of yrs. 5 year olds are expected to go to school	12.2 years in MDCs, 7.3 years in LDCs; 16.4 years in MDCs, 10.1 years in sub-Saharan Africa
	Other Education Indicators		pupil/teacher ratio? lower the ratio = more effective instruction	See maps to describe differences MDCs < 24 pupils/teacher, LDCs > 25 pupils/teacher
			literacy rate	See maps to describe differences MDCs > 96% literate, LDCs < 80%
Health and Welfare (p 360)	Life expectancy		average # of years a newborn can expect to live at current infant/mortality levels. MDCs use $ to protect public assistance.	Worldwide=72, >80 MDCs, 61 - sub-Saharan Africa
	Infant Mortality Rate		# of children who die w/in their first year of life.	5% IMR in LDCs; .5% IMR in MDCs (malnutrition, lack of medicine, dehydration & diarrhea)

Indicates factor used in actual mathematical measurement of HDI, other factors are "considered"