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Thinking Geographically Mapping Portfolio

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Stage 1 – Desired Results

<p>Established Goals (e.g., standards)</p> <p>AP Human Geography Scope and Sequence Unit 1 - selected portions</p> <p>TEKS-</p> <ul style="list-style-type: none"> • WG.5A - Analyze how the character of a place is related to its political, economic, social, and cultural elements. • WG.9B - Describe the impact of new information technologies such as the internet, Global Positioning System (GPS), or Geographic Information Systems (GIS). • WG.21C - Create and interpret different types of maps to answer geographic questions, infer relationships, and analyze change • WG.22C - Use social studies terminology correctly. <p>College Board AP Human Geography Course Exam Description (CED) 2019-2020.</p>	Transfer	
	<i>Students will independently use their learning to...</i>	
	create a map portfolio that addresses patterns and spatial relationships at the global, regional, national, and local scales.	
	Meaning	
	<p>Understandings <i>Students will understand that....</i></p> <ul style="list-style-type: none"> • Geographers use maps and data to depict relationships of time, space, and scale. • Geographers analyze relationships among and between places to reveal important patterns. • Geographers analyze complex issues and relationships with a distinctively spatial perspective. 	<p>Essential Questions</p> <ul style="list-style-type: none"> • Why do geographers study relationships and patterns among and between places? • How do geographers use maps to help them discover patterns and relationships? • How do geographers use a spatial perspective to analyze complex issues and relationships? • What types of maps are most useful for different types of information?
Acquisition		
<p>Knowledge <i>Students will know...</i></p> <ul style="list-style-type: none"> • Types of maps include reference maps and thematic maps. • Types of spatial patterns represented on maps include absolute and relative distance and direction, clustering, dispersal, and elevation. • All maps are sensitive information; map projections inevitably distort spatial relationships in shapes, area, distance, and direction. • Data may be gathered in the field by organizations or by individuals • Geospatial technologies include geographic information systems (GIS), satellite navigation systems, remote sensing, and online mapping and visualization. • Spatial concepts include absolute and relative location, space, place, distance-decay, time-space compression, and patterns. • Scale analysis include global, regional, national, and local. • Patterns and processes at different scales reveal variations in, and different interpretations of, data. • Regions are defined on the basis of one or more unifying characteristics or patterns of activity. • Types of regions include formal, functional, and perceptual/vernacular. 	<p>Skills <i>Students will be able to...</i></p> <ul style="list-style-type: none"> • Identify types of maps, the type of information presented in maps, and different kinds of spatial patterns and relationships portrayed in maps. • Identify different methods of geographic data collection. • Define major geographic concepts that illustrate spatial relationships. • Define scales of analysis used by geographers. • Explain what scales of analysis reveal. • Use and interpret maps. 	

Stage 2 – Evidence

CODE (M or T)	Evaluative Criteria (for rubric)	
		Performance Task(s) <i>Students will demonstrate meaning-making and transfer by...</i>

T	See Rubric	<p>This unit is designed to introduce the students to the foundations of thinking geographically. Students will create a map portfolio that applies to the big ideas of AP Human Geography. Students will critically analyze and reflect on the “why of where” to understand geographic perspective by utilizing quantitative and qualitative data. Students will turn in a map portfolio that will address purpose, patterns, and spatial relationships among places.</p> <p>-----</p> <p>Other Evidence (e.g., formative)</p> <p>Unit 1 - Vocabulary Quiz Unit 1 - Progress Check via College Board Personal Progress Check Exit Tickets Map Portfolio Unit 1 Exam</p>
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Stage 3 – Learning Plan

CODE (A, M, T)	<p style="text-align: center;">Pre-Assessment</p> <p style="text-align: center;"><i>How will you check students’ prior knowledge, skill levels, and potential misconceptions?</i></p> <p>Students will take a Quizziz prior to beginning the Unit. Scores will be recorded in on a spread sheet to show overall growth at the each of each unit.</p> <p>Quizziz - https://quizizz.com/admin/quiz/5b70fe5a1e4d500019f04831</p>
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M	<p>Learning Activities</p> <p>Lesson 1 – Intro to Thinking Geographically</p> <p>Opening Activity (10 minutes max): Students will access the Quizziz and complete the pre-assessment on Unit 1 - Thinking Geographically. Record overall scores for each class.</p> <p>Quizziz - https://quizizz.com/admin/quiz/5b70fe5a1e4d500019f04831</p> <p>Stimulus- Following the Quizziz and discussing with the students that they do have prior knowledge that “WE” as a class can capitalize on as well as gain knowledge previously unknown. Direct the student’s attention to the board to view the Youtube clips.</p> <p>Teacher Note: Class does not have to view all three clips. Following the clips ask questions to the class to have students begin to think critically. For example: following Jimmy Kimmel’s comedy ask the students:</p> <p><i>Why did I show you this clip? Why is it important to know where countries are located?</i></p> <p>After viewing West Wing: <i>Can you name the two projections and explain the difference between the two?</i></p> <p>After viewing Maps that prove you don’t know the Earth: <i>What are two things you learned from the clip?</i></p>	<p>Progress Monitoring (e.g., formative data)</p> <p>Quizziz</p>
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	<p>Video - Jimmy Kimmel Live: Can You Name a Country? (3:44) - https://youtu.be/kRh1zXFKC_o</p> <p>West Wing; Mercator vs Peters-Gall (3:59) - https://youtu.be/vVX-PrBRtTY?list=PLkTrcwjStGmP_RdeMUEHhV9EZkEuaK4n</p> <p>Maps that prove you don't know the Earth (2:23) - https://youtu.be/KUF_Ckv8HbE?list=PLkTrcwjStGmP_RdeMUEHhV9EZkEuaK4n</p>	
M	<p>Students should record their responses in their journal/notes.</p> <p>Handout and introduce the Map Portfolio that students must turn in at the end of the unit prior to the Unit Exam. Explain that the students will need to create four different maps using field data gathered digitally and/or physically. Students will create a map at the local, national, regional, and global scale. Students will also implement various geographical concepts by analyzing and applying to their maps.</p> <p>Lesson 2: Basic Concepts</p> <p>Opening Activity:</p>	Journal response
T	<p>Pictionary with vocabulary. Split the classroom into two groups. Have one representative from each group approach the board. Give the same vocabulary word to each student and have him or her draw it on the board. First to answer correctly wins. Play three rounds.</p> <p>Student Activity:</p>	
A	<p>Each student receives a blank sheet of paper and a concept from unit 1.</p> <p>Assignment Guidelines:</p> <p>Word is spelled correctly, neatly, and large enough to read from 4 feet away.</p> <p>Definition is correct in AP Human Geography terminology.</p> <p>Use in a complete sentence.</p> <p>Illustration/drawing of the word</p> <p>Closing: Homework study vocabulary for quiz</p> <p>Exit Ticket:</p> <p>Student places their word on the vocab wall.</p>	Exit ticket: Basic Concept Activity
A	<p>Lesson 3: Types of Projections and Distortion</p> <p>Direct Teaching: PowerPoint Lecture: Key issue 1, 2, and 3 Chapter 1 Rubinstein 11th edition, Matthew Cartlidge https://drive.google.com/file/d/0By5nH2PQtkiqdnlyeWVqWjBIRUk/view?usp=sharing</p> <p>Exit Ticket (5mins): Which map projection did you find most useful and why? Explain.</p> <p>Lesson 3: Types of Global Projections (cont.)</p> <p>Small Group</p>	Note taking monitoring Exit Ticket: Journal response

https://www.google.com/search?q=regions+of+the+US+map&client=safari&rls=en&source=Inms&tbm=isch&sa=X&ved=0ahUKEwj1z_qCpfbIAhVDb60KHYS-CvQQ_AUIESgC&biw=1440&bih=741#imgrc=GWhowIWdQIS3YM:

Functional regions:

https://ops.fhwa.dot.gov/freight/freight_analysis/freight_story/major.htm

Perceptual/vernacular region:

<https://www.businessinsider.com/regions-america-bible-belt-rust-belt-2018-4#jell-o-belt-6>

Requirements for the map:

Outline the formal regions of the US each in a different color:

West	Midwest
Northeast	South

Connect each functional region with a currently used highway:

Label major cities of connection.

Dallas or DFW	Los Angeles
New York City	Chicago

Shade/color in the perceptual regions using the article:

Rust Belt	Wheat Belt
Bible Belt	Corn Belt
Jell-O Belt	Unchurched Belt
Sun Belt	Cotton Belt

** Students must include a title, absolute direction, and legend to the map.

Teacher note: Instruct students to outline the regions first before shading in the areas. Multiple regions will overlap.

Lesson 6: Mental Maps/ Descriptive Imagery

Individual and Think/Pair/Share

Whole class discussion: Pass out dry erase boards. Groups will have 5 minutes to discuss and attempt to map out the school based on their own memory. This activity is based on the student's mental construct of the school. Students may not use a map or electronics. Have groups take a picture and post to the classroom Padlet.

** Important to draw from the birds eye view. This is a mental map and will differentiate between whom is answering.

Pass out the article *The Mask of the Red Death* by Edgar Allan Poe

https://americanenglish.state.gov/files/ae/resource_files/the_mask_of_the_red_death.pdf

US Map regional activity

Padlet

T	<p>As student read the article, they must illustrate the imagery on a separate blank sheet of paper. Students may collaborate together</p> <p>Closing: Have students pair and share their maps together. Turn in at the end of lesson.</p> <p>Lesson 7: Local Level Maps – Chalk it Out!</p> <p>Absolute vs Relative Location of the school. Have students research the two concepts and list their answers in their notes.</p> <p>Lead the students outside to the sidewalk and have them draw the school using GIS tools and the data collected from their research. Maps must include absolute and relative location. Maps must have labels, scale, and cardinal direction.</p>	Mental Maps				
T	<p>Closing: Describe the elements that give the school a locational identity (place).</p> <p>Lesson 8: Vocabulary Quiz and Types of Diffusion</p>	Chalk it out Absolute vs Relative				
A	<p>Direct Teaching: PowerPoint Lecture: Expansion and Relocation diffusion Dalynn Robinson, STEM https://drive.google.com/file/d/1FEg0uAjM7dJI8jLFdII5vZg2z01zrFs5/view?usp=sharing</p> <p>Discuss the 4 types of diffusion using the examples provided on the PPT. Students will take notes and provide their own examples to apply to each concept.</p>					
	<table border="1" data-bbox="211 1066 1412 1150"> <tr> <td data-bbox="211 1066 812 1108">Relocation Diffusion</td> <td data-bbox="812 1066 1412 1108">Stimulus Diffusion</td> </tr> <tr> <td data-bbox="211 1108 812 1150">Contagious Diffusion</td> <td data-bbox="812 1108 1412 1150">Hierarchical Diffusion</td> </tr> </table> <p>Exit ticket: <i>How does diffusion tie into spatial relationships and patterns?</i></p>	Relocation Diffusion	Stimulus Diffusion	Contagious Diffusion	Hierarchical Diffusion	Exit Ticket
Relocation Diffusion	Stimulus Diffusion					
Contagious Diffusion	Hierarchical Diffusion					
T	<p>Lesson 9 (5 days): Research and Application</p> <p>Allow students to work on their Map Portfolios. Days 1-4: Students focus on the maps and explanations Day 5: Answer the Big Idea questions</p>					
T	<p>Lesson 10: Review and Unit Exam</p> <p>Have students retake the Quizziz given at the beginning of the Unit. Record overall growth for each section. Quizziz - https://quizizz.com/admin/quiz/5b70fe5a1e4d500019f04831</p> <p><i>Exam questions come from 5 steps to a 5: 500 Human Geography Questions to Know by Test Day by Jason Flowers, Elyse Zavar, Jessica Zimmer, and Thomas Evangelist</i></p>	Map Portfolio Quizziz Unit Exam				

Project Due Date _____

Unit 1 - Thinking Geographically

Map Portfolio

Goal- This project will require you to apply the knowledge you have gained through the lessons over the course of the unit. To show mastery and a true understanding of the unit, you will create four different types of maps illustrating different types of data, patterns, and spatial relationships. You **MUST** provide a thorough explanation in a **one-chunk JANE SCHAFFER** format for **EACH** map. Additionally you must answer the *Big Idea* questions. Please turn in your completed maps/data in a compiled hardcopy portfolio on the day of review, prior to the unit exam.

Portfolio Requirements:

- Hard copy submission only, digital submissions will not be accepted. Please make arrangements to turn in on time appropriately.
- Title page - Title, Name, Course, School, Date.
- Table of Contents
- Global Map
 - Explanation
- Regional Map
 - Explanation
- National Map
 - Explanation
- Local Map
 - Explanation
- Big Idea Questions - Reflection
 - *Why do geographers study relationships and patterns among and between places?*
 - *How do geographers use maps to help them discover patterns and relationships?*
 - *How do geographers use a spatial perspective to analyze complex issues and relationships.*



Photo by Himesh Kumar Behera on Unsplash

Map Requirements:

Must be hand drawn. Use the GIS tools to assist in your research. If need be, you may stencil or trace the maps.

Each map must have:

- Title
- Scale
- Cardinal direction
- Legend

Themes - Each map must be unique and consist of a different theme/purpose. Choose four different themes from the list provided.

Physical	Political/Formal	Cartogram
Choropleth	Perceptual/Vernacular	Functional
Dot Density	Graduated Symbol	Isopleth

- **Global Map** - Hand draw the projection and describe the distortions and purpose.
- **Regional Map** - Hand draw a regional map. Map must include state lines and theme. Describe the purpose of the map.
- **National Map** - Hand draw a national map. Map must include state lines and a theme/purpose. Explain.
- **Local Map** - Choose between the following:

City	School	Neighborhood
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Hand draw the local map using GIS data and/or physical inquiry. Describe the purpose and theme.

Explanation - Minimum requirements for a one chunk Jane Schaffer paragraph:

- Topic sentence
- Concrete Detail
- Commentary
- Commentary
- Concluding sentence

Describe the map(s) to the audience. What is the purpose and data you are conveying to the audience? Use evidence (concrete detail) from your map to support our commentary. If you need help, please do not hesitate to ask.

Your explanation must include geographic concepts to demonstrate understanding. You must use each concept at least ONCE overall in your portfolio.

Thematic Map	Absolute distance	Relative location	Formal Region
Functional Region	Perceptual/ Vernacular Region	Pattern	Relationship
Geographic Information Systems	Map Projection	Place	Clustering

Rubric

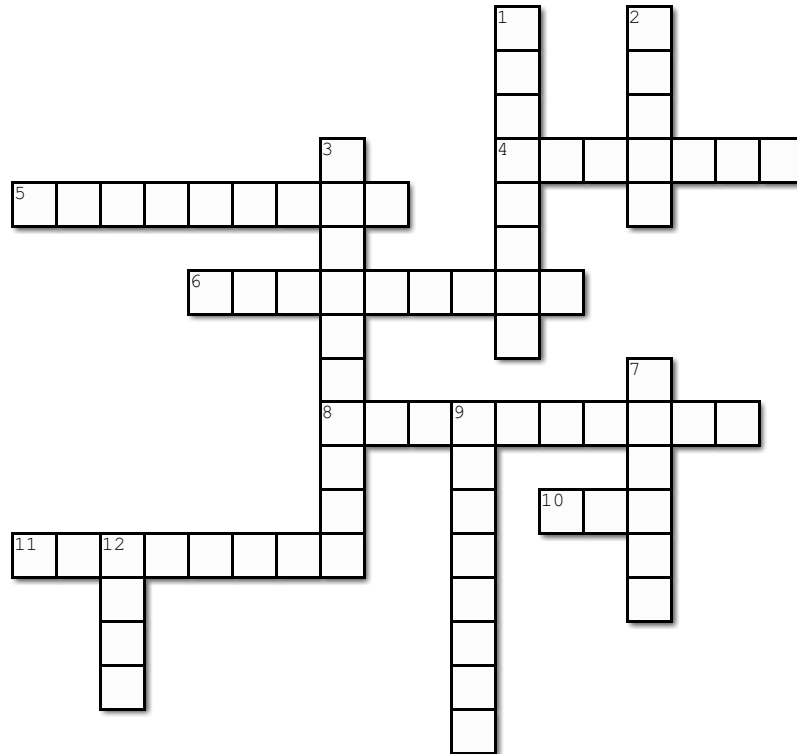
Maps 40pts	All 4 maps have a different theme and is distinguishable. Title tells the purpose/content of the map. All labels and features can be easily read, spelled correctly, and drawn to scale. Map includes a legend, scale, and direction. 31-40pts	3 of the 4 maps have a different distinguishable theme. Title tells the purpose/content of the map. Majority of the labels can be easily read, spelled correctly and drawn to scale with very few errors. Map includes a legend, scale, and direction. 21-30pts	2 of the 4 maps have a different distinguishable theme. Title is displayed but does not convey the purpose/content clearly. Labels can be easily read but consist of spelling errors. Map is missing essential components such as a legend, scale, and/or direction. 11-20pts	Maps fail to have different distinguishable themes. Maps are missing a title and the purpose is confusing. Labels include many errors and features are not drawn to scale. Map is missing essential components such as a legend, scale, and/or direction. 0-10pts
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<p>Content 40pts</p>	<p>All four maps have a chunk paragraph explanation. Description addresses the purpose of the map clearly. All geographic concepts are used at least once and appropriately. Student addresses the follow up questions. No spelling errors.</p> <p>31-40pts</p>	<p>All four maps have a chunk paragraph explanation. Description attempts to address the purpose of the map. Most of the geographic concepts are used at least once and appropriately. Student addresses the follow up questions. Very few spelling errors.</p> <p>21-30pts</p>	<p>3 of the 4 maps have a chunk paragraph explanation. Description attempts to address the purpose of the map but is confusing. Most of the geographic concepts are used at least once and appropriately. Student addresses the follow up questions Many spelling errors.</p> <p>11-20pts</p>	<p>1 to 2 of the 4 maps have a chunk paragraph explanation. Description attempts to address the purpose of the map but is confusing. Most of the geographic concepts are NOT used at least once and/or appropriately. Student does not address the follow up questions. Many spelling errors.</p> <p>0-10pts</p>
<p>Organization 20pts</p>	<p>Maps are hand drawn, neatly colored and displayed. Components are placed into a portfolio. Portfolio is organized with a title page and table of contents.</p> <p>16-20pts</p>	<p>Maps are hand drawn, neatly colored and displayed. Components are placed in portfolio. Portfolio is incomplete or missing components.</p> <p>11-15pts</p>	<p>Maps are poorly hand drawn. Coloring is not neatly displayed. Portfolio is missing essential components.</p> <p>6-10pts</p>	<p>Maps are messy and not placed in a portfolio. Organization is out of order and missing components.</p> <p>0-5pts</p>
<p>Total</p>				

Overall Grade

1. reference map
2. thematic map
3. absolute distance
4. absolute direction
5. relative distance
6. relative direction
7. clustering
8. dispersal
9. map projection
10. geographic information systems
11. satellite navigation systems
12. remote sensing
13. census data
14. absolute location
15. relative location
16. site
17. place
18. pattern
19. global
20. regional
21. national
22. local
23. formal region
24. functional region
25. perceptual/vernacular region
26. Isoline
27. Cartogram
28. Longitude
29. Latitude
30. Choropleth
31. Dot map
32. Mental map
33. Large scale
34. Small scale

Unit 1 Thinking Geographically



Created using the Crossword Maker on TheTeachersCorner.net

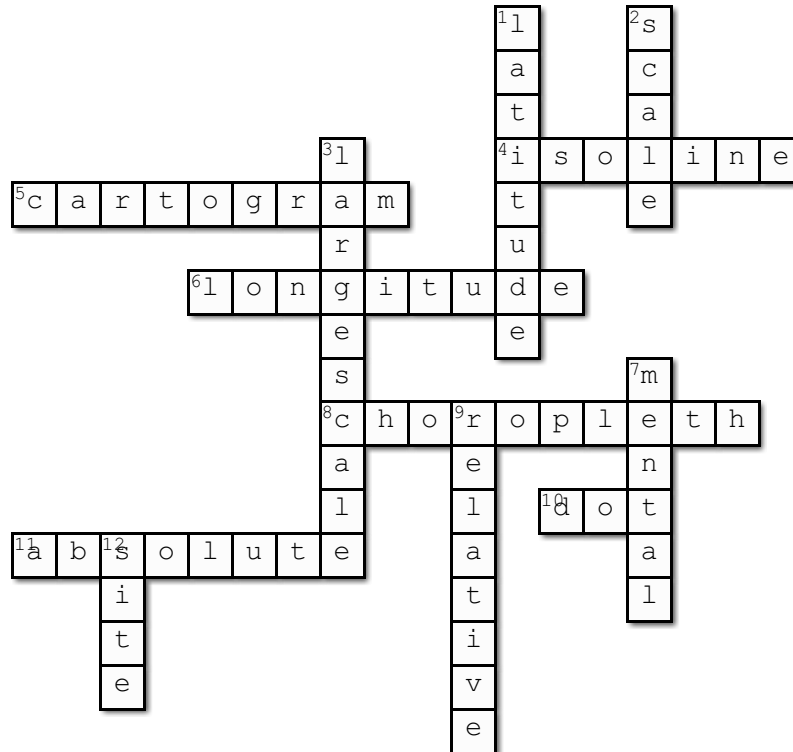
Across

4. Map line that connects points of equal or very similar values.
5. type of thematic a map on which statistical information is shown in diagrammatic form
6. The angular distance east or west of the prime meridian, defined by meridians
8. type of map that use tones of color to represent data
10. Type of map that uses points to show the precise locations of specific observations or occurrences
11. _____ distance that can be measured with a standard unit of length, such as a mile or kilometer

Down

1. The angular distance north or south of the equator, defined by parallels
2. The ratio between the size of an area on a map and he actual size of that same area on the earth's surface
3. A relatively small ratio between map units and ground units
7. Cognitive maps
9. _____ distance that includes the costs of overcoming the friction of absolute distance separating two places
12. The absolute location of a place, described by local relief, landforms, and other cultural or physical characteristics

Unit 1 Thinking Geographically



Created using the Crossword Maker on TheTeachersCorner.net

Across

4. Map line that connects points of equal or very similar values. (**isoline**)
5. type of thematic a map on which statistical information is shown in diagrammatic form (**cartogram**)
6. The angular distance east or west of the prime meridian, defined by meridians (**longitude**)
8. type of map that use tones of color to represent data (**choropleth**)
10. Type of map that uses points to show the precise locations of specific observations or occurrences (**dot**)
11. _____ distance that can be measured with a standard unit of length, such as a mile or kilometer (**absolute**)

Down

1. The angular distance north or south of the equator, defined by parallels (**latitude**)
2. The ratio between the size of an area on a map and the actual size of that same area on the earth's surface (**scale**)
3. A relatively small ratio between map units and ground units (**largescale**)
7. Cognitive maps (**mental**)
9. _____ distance that includes the costs of overcoming the friction of absolute distance separating two places (**relative**)
12. The absolute location of a place, described by local relief, landforms, and other cultural or physical characteristics (**site**)

Name:
Period:
Date:

Different Types of Projections:

Title/Type:		Author/Creator:
Projection:	Distortions	
Title/Type:		Author/Creator:
Projection:	Distortions	

Title/Type:	Author/Creator:
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Projection:	Distortions
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Title/Type:	Author/Creator:
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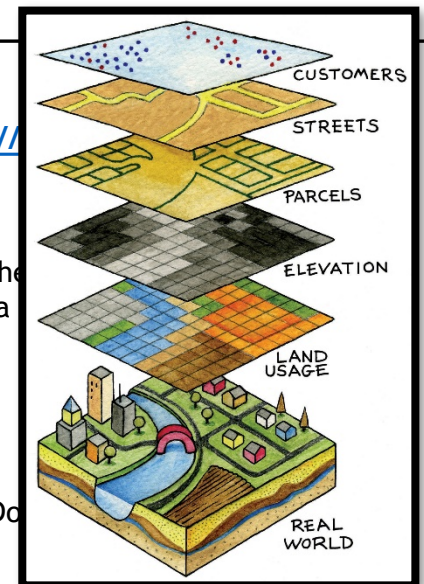
Projection:	Distortions
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Title/Type:		Author/Creator:
Projection:	Distortions	
Title/Type:		Author/Creator:
Projection:	Distortions	

GIS (Geographic Information Systems)

Navigate to Google and search “National Geographic Map Maker” (<http://mapmaker.nationalgeographic.org/#/>)

Goal: This activity will allow you to utilize the National Geographic Map Maker application to learn about GIS (Geographic Information Systems). GIS allows for the layering of data to understand patterns and relationships. Please report your data on a separate sheet of paper.



1. Click on “Add Layer”>”Food”>”Rice Production”>Click on “+” sign>”Done”>”Legend”
 - a. Who are several of the top rice producers in the world?
2. Keep that layer for a moment and place a pin on the top rice producers. Do so by clicking on the left tool bar (“Draw a marker”) and placing it on the countries who produce the greatest amount of rice.
3. Remove that layer by clicking on the “Layers” tab and clicking the “x” on the layer. Your pins should still be present.
4. Add another layer. This time add the layer of “undernourishment” also under the “food” category.
 - a. Which regions are most undernourished?
 - b. Are the top rice producers (those that you pinned) also undernourished? Which are? Which aren’t?
5. Retain the “undernourishment” layer. Add the “Gross National Income per Capita” layer. Set the “undernourishment” layer to approximately 100% transparency. Set the “Gross National...” layer to 50% transparency. Make sure GNI is the top layer and undernourishment is the bottom.
 - a. Define Gross National Income per Capita (look at where you select this layer for a description or Google)
 - b. What is the connection between Gross National Income and undernourishment?
6. Remove all current data by clicking “reset map.”
7. Add the “Climate Zone” layer by looking under the “Climate and Weather” category.
 - a. What kind of thematic map is this?
 - b. What zone is Orlando located in (make sure you view the legend to determine this)?
8. Remove the current layer and add the “African American Population (1960)” layer under the “U.S. History” category.
 - a. What regions in the United States are African Americans clustered in?
9. Retain the previous layer and add the “Major Religions” layer under “Culture.” Make sure the African American population layer is on the top and set at approximately 50% transparency. Set the “religions” layer at 100%.
 - a. What major religion are African Americans predominately affiliated with?
 - b. What religion is most common in the north east and Great Lakes region?
10. Remove all current data by clicking “reset map.”
11. Add the “Women in Parliament” layer. “Parliament” refers to the fact that these women are in significant leadership roles in their country and are responsible for creating legislation (laws)
 - a. Does Mexico have more/ less women in parliament than the U.S.?
 - b. What regions have the most?
 - c. What regions have the least?
 - d. What regions surprised you?
12. Remove all current data by clicking “reset map.”
13. Add the layer “Lights At Night” under the “Human Systems” category
 - a. Which areas are the brightest?
 - b. Which areas are the darkest?
14. Retain the current layer and add the layer “Population Density” also under the “Human Systems” category. Make sure the “Lights at Night” is first and set the transparency to approximately 50%. Set the transparency of the pop. density layer to 100%.
 - a. Explain the correlation (mutual relationship between two or more things).
 - b. Does the correlation hold true for all areas of the world?



Unit 1: Nature and it's Perspective

1. A ratio of the number of items within a defend unit of area measures
 - A. Dispersion
 - B. Direction
 - C. Pattern
 - D. Density
 - E. Diffusion
2. Which of the following best describes the *site* of Manhattan?
 - A. A regional transportation hub for the northeastern US
 - B. A midway point along an urban corridor stretching from Boston to Washington D.C.
 - C. An island border by Hudson and East River
 - D. An important center for international trade and commerce
 - E. An urban center located two hours northeast of Philadelphia by train.
3. Spatial coordinates of latitude and longitude express
 - A. Relative location
 - B. Absolute location
 - C. Relative direction
 - D. Absolute direction
 - E. Relative distance
4. Which of the following concepts refers to the spatial arrangement of items or feature within a given area?
 - A. Distribution
 - B. Direction
 - C. Accessibility
 - D. Trajectory
 - E. Scale
5. A method for representing the three-dimensional surface of the earth on the two-dimensional surface of a map is known as
 - A. Scale
 - B. Globalization
 - C. Proximity
 - D. Ethnography
 - E. Projection
6. A subjective image of an area informed by individual perception and experiences in that area is known as a
 - A. Thematic map
 - B. Reference map
 - C. Mental map
 - D. Contour map
 - E. Topographic map

7. On a two dimensional surface map, all of the following attributes can become distorted EXCEPT
- A. Shape
 - B. Area
 - C. Distance
 - D. Direction
 - E. Relative location
8. The Prime Meridian, which passes through Greenwich, England, is equivalent to which of the following line of longitude?
- A. 0 degrees longitude
 - B. 45 degrees longitude
 - C. 90 degrees longitude
 - D. 180 degrees longitude
 - E. 270 degrees longitude
9. The geographical region whose center is located along the equator and whose area extends roughly 23 degrees north and south of the equator.
- A. Polar region
 - B. Tundra
 - C. Rainforest
 - D. Tropical zone
 - E. Taiga
10. Which of the following terms refers to a ratio between distances portrayed on a map and actual distances of the Earth's surface that correspond to this map?
- A. Chart
 - B. Scale
 - C. Contour
 - D. Grid
 - E. Projection
11. Which of the following most directly refers to geographical techniques that collect information about the earth's surface from distantiated perspectives?
- A. Geographic information system
 - B. Geomancy
 - C. Remote sensing
 - D. Ethnography
 - E. Demography
12. The forced dispersion of Jews from their ethnic homeland, which took place across many centuries, is prominent example of
- A. Stimulus diffusion
 - B. Diaspora
 - C. Pilgrimage
 - D. Globalization
 - E. Receptivity

13. In cartography, parallels refer to
- Lines of latitude
 - Meridians
 - The scale of the map
 - Line of longitude
 - The alignment of the poles

E. Cartograms

14. Which of the following pairs of states possess territory along the Strait of Gibraltar?



- France and China
 - Tunisia and Italy
 - Spain and Morocco
 - Australia and Portugal
 - Chile and Algeria
15. Thematic Maps that employ a range of color tones to illustrate how particular values vary across predefined areas, such as counties, provinces, or states, are referred to as
- Dot maps
 - Choropleth maps
 - Proportional symbol map
 - Isoline map

16. Curves on a topographic map that are used to illustrate specific values of elevation above or below sea level are known as

- District lines
- Latitude lines
- Transmission lines
- Contour lines
- Longitudinal lines

17. The cardinal points north, south, east, and west correspond to

- Relative location
- Absolute distance
- Absolute location
- Relative distance
- Absolute direction

18. Which of the following fields is least associated with human geography?

- Psychology
- Cultural ecology
- Sociology
- Geomorphology
- Political science

19. Relative to lines of latitude near the equator, lines of latitude near the poles are

- A. Longer
- B. Straighter
- C. Shorter
- D. Wider
- E. More accurate

20. Accessibility and connectivity are two interrelated ways to describe

- A. Absolute location
- B. Spatial concentrations
- C. Relative directions
- D. Geographical sites
- E. Spatial interactions

21. A map serves two purposes:

- A. As a reference tool
- B. As a communications tool
- C. As a geographical guide
- D. Both B and C
- E. Both A and B

22. There are _____ time zones.

- A. 32
- B. 24
- C. 12
- D. 18
- E. 90

23. _____ is used to describe the physical characteristics of a place.

- A. Site
- B. Situation
- C. Signs
- D. Signature
- E. Advertisements

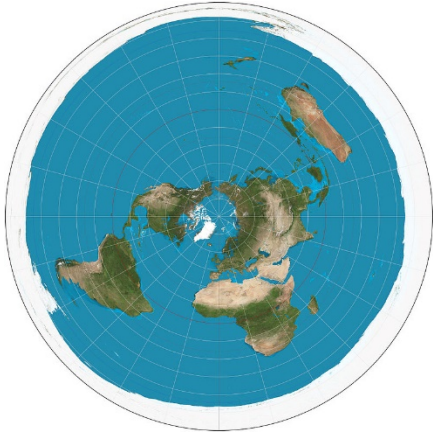
24. A formal region is also known as a _____, which everyone shares a common one or more distinctive characteristics.

- A. Uniform region
- B. Nodal region
- C. Perceptual region
- D. Functional region
- E. Perceptual region

25. Which of the following is an imaginary line that runs north to south at 180 degrees longitude?

- A. Greenwich Mean Time
- B. Equator
- C. International Date Line
- D. Central Mountain Time
- E. Imaginary Imperium Line

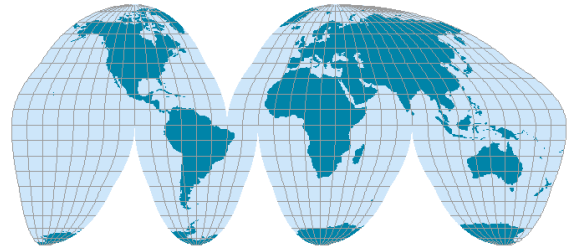
26.



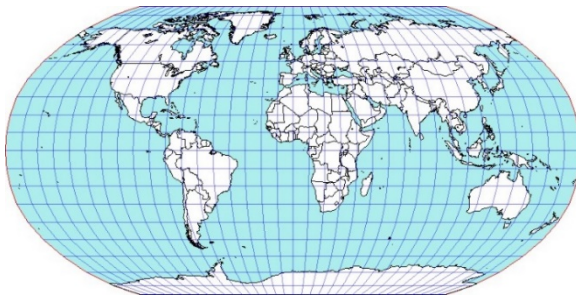
Which of the following is the above projection?

- A. Azimuthal
- B. Fuller
- C. Gall
- D. Mercator
- E. Peters

27. Which of the following is the correct projection?



- A. Robinson
- B. Gall
- C. Azimuthal
- D. Waterman
- E. Goode



28.

Which of the following is the corresponding projection?

- A. Fuller
- B. Robinson
- C. Mercator
- D. Gall
- E. Cylindrical