Started on	Thursday, 10 October 2024, 1:19 PM
State	Finished
Completed on	Thursday, 10 October 2024, 1:25 PM
Time taken	5 mins 45 secs
Grade	**19.00** out of 20.00 (**95**%)

Question **1**

Correct

Mark 2.00 out of 2.00

WGS84...

a. Is a datum for representing the shape of the earth that was defined by creating a bounding box around the Earth and then computing the difference with the Earth's real shape.

b. Is an ellipsoid defined by the World Geodetic System in 1984. ✓

c. A color scheme for representing the Earth's shape.

d. Is an approximation to the shape of the Earth and is exactly the same as the ED50 system used in the USA.

Your answer is correct.

Question **2**

Partially correct

Mark 1.00 out of 2.00

There are different types of geographical phenomena, and these are represented in different ways.

Associate the following phenomena with their most appropriate representation.

The Alps	Area ✗
Domino's Pizza restaurants' locations	Point ✓
Route 66	Line ✓
Lake Baikal	Surface ✗

Your answer is partially correct.

You have correctly selected 2.

Question 3

Correct

Mark 2.00 out of 2.00

The Equirectangular projection...

a. It a conical projection

b. Does not preserve area ✓

c. Does not create distortion

d. Preserves the central points but distorts the edges to preserve the area

Your answer is correct.

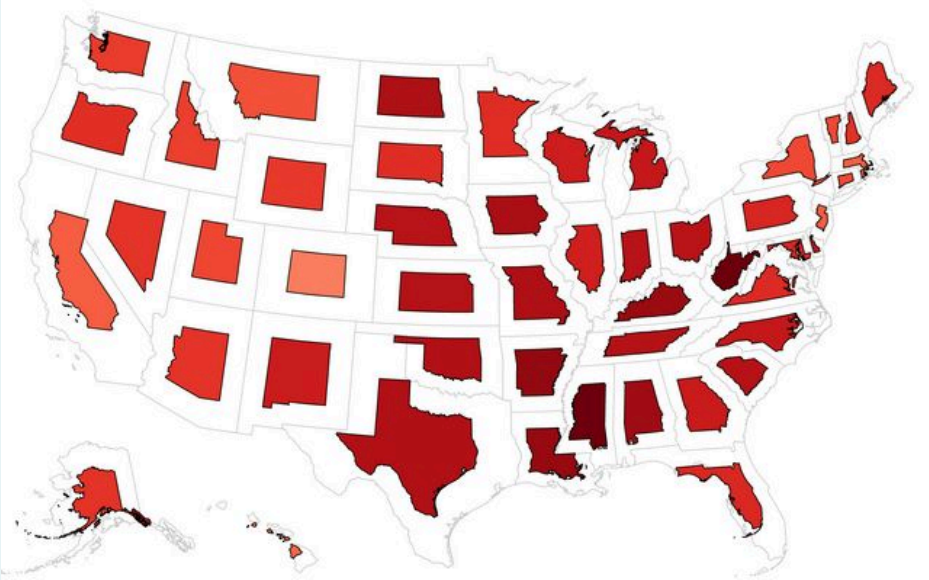
Question 4

Correct

Mark 2.00 out of 2.00

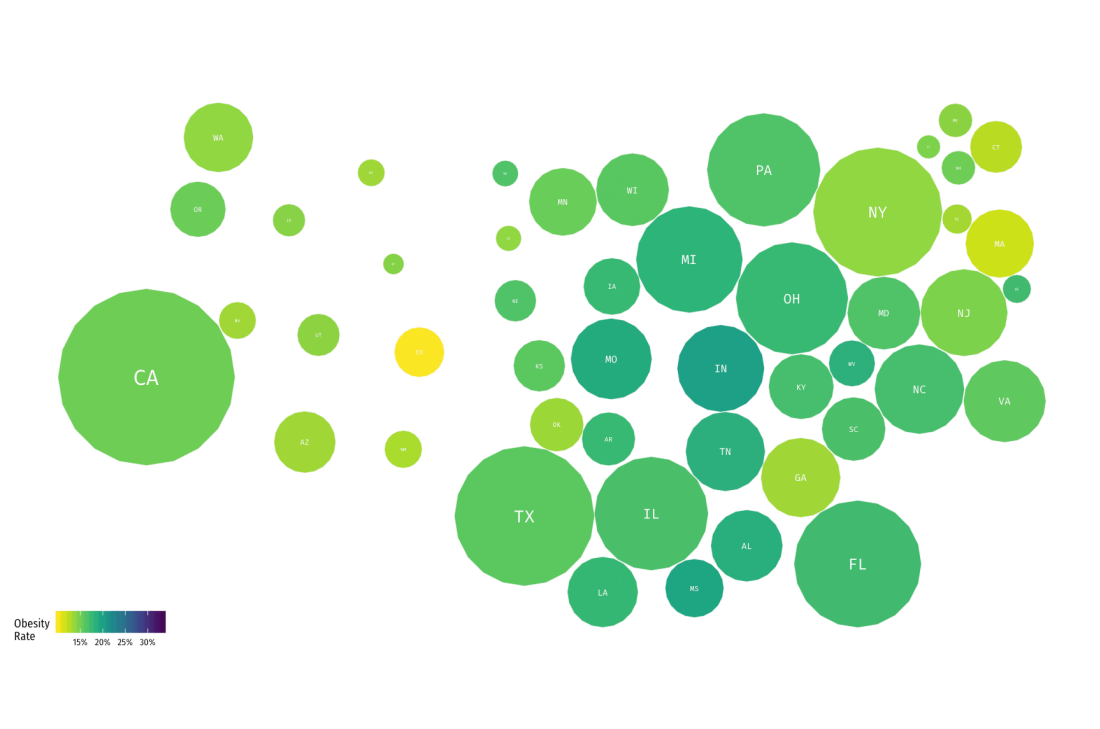
There are different topology geographical representations, besides the traditional cartogram. Associate the following idioms with their description.

Distorts the area according to the data under representation with a visual discontinuity between the items, while maintaning the original spacial organization



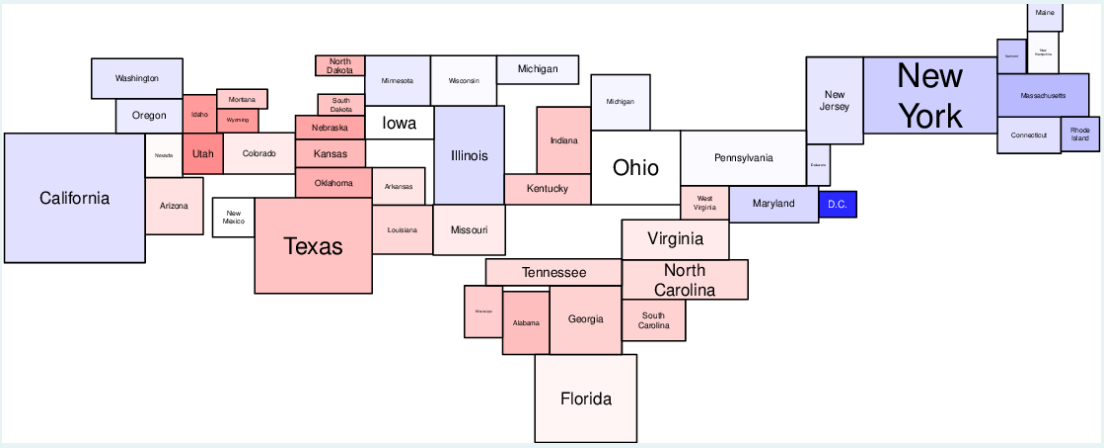
Non-contiguo

Relies a set of circles in the approximate positions to the geographical data items under representation



Circular carto

Distorts the area according to the data under representation, using a grid to draw the areas.



Rectangular

Your answer is correct.

Question 5

Correct

Mark 2.00 out of 2.00

Bundles are a great mechanism...

a. To enhance the interpretation of path-based representations as an alternative to path density ✓

b. As an alternative to binning in dot maps

c. For grouping adjacent areas in geographical representations

d. To integrate in choropleths, enhancing their effectiveness

Your answer is correct.

Question 6

Correct

Mark 2.00 out of 2.00

The mercator projection

a. Is the same as the Lambert Cylindrical projection.

b. Preserves the area

c. Preserves the form, making the poles look larger than they actually are. ✓

d. Is very rarely used

Your answer is correct.

Question 7

Correct

Mark 2.00 out of 2.00

Point maps...

a. Show items of interest as points in a map, relying on density for drawing the user's attention. ✓

b. Are maps in which data items are represented as points - and when we're talk about points we exclude other shapes such as squares or even other idioms used in tandem.

c. Show items of interest as points in a map and work better when more than 7 colors are used to represent different categories in the same map

d. Show distribution of items over time

Your answer is correct.

Question 8

Correct

Mark 2.00 out of 2.00

Do dot maps have scalability issues that may prevent them from being appropriate for huge datasets?

a. Yes, but there are solutions such as converting them to treemaps or node-link diagrams.

b. Not really, no.

c. Yes, but there are solutions such as relying on derived measures, clustering and binning. ✓

d. Yes, so they should be avoided altogether.

Your answer is correct.

Question 9

Correct

Mark 2.00 out of 2.00

Match the type of projection with its description.

Azimuthal — Preserves direction from a c ✓

Conform — Preserves shape ✓

Equal-area — Preserves area ✓

Your answer is correct.

Question 10

Correct

Mark 2.00 out of 2.00

Chrolopleth maps...

a. Rely on coloring areas according to the dataset to avoid perception distortion

b. Have some pitfalls in terms of perception distortion and may indeed hinder information interpretation ✓

c. Are point-based geographical representations

d. Rely on lines to depict important paths in data

Your answer is correct.

Question 3

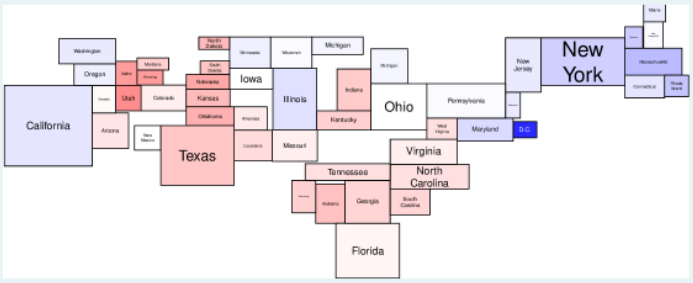
Correct

Mark 2.00 out of 2.00

Flag question

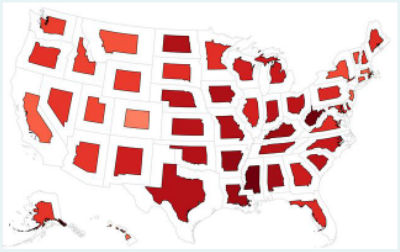
There are different topology geographical representations, besides the traditional cartogram. Associate the following idioms with their description.

Distorts the area according to the data under representation, using a grid to draw the areas.



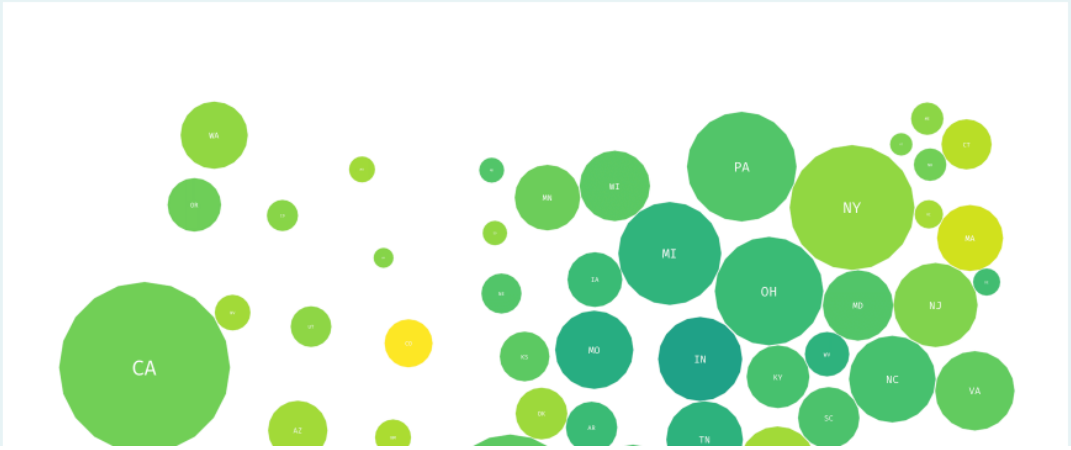
Rectangular Cartogram ✓

Distorts the area according to the data under representation with a visual discontinuity between the items, while maintaning the original spacial organization



Non-contiguous cartogram ✓

Relies a set of circles in the approximate positions to the geographical data items under representation



Circular cartogram ✓

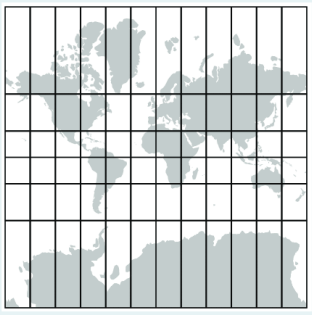
Question 2

Correct

Mark 2.00 out of 2.00

Flag question

This is a mercator projection:



Select one:

- True ✓
- False

Question 8

Correct

Mark 2.00 out of 2.00

Flag question

Point maps...

a. Show items of interest as points in a map and work better when more than 7 colors are used to represent different categories in the same map

b. Show distribution of items over time

c. Show items of interest as points in a map, relying on density for drawing the user's attention. ✓

d. Are maps in which data items are represented as points - and when we're talk about points we exclude other shapes such as squares or even other idioms used in tandem.

Your answer is correct.

Question 6

Correct

Mark 2.00 out of 2.00

Flag question

Bundles are a great mechanism...

a. For grouping adjacent areas in geographical representations

b. To enhance the interpretation of path-based representations as an alternative to path density ✓

c. As an alternative to binning in dot maps

d. To integrate in choropleths, enhancing their effectiveness

Your answer is correct.

Question 7

Correct

Mark 2.00 out of 2.00

Flag question

Do dot maps have scalability issues that may prevent them from being appropriate for huge datasets?

a. Yes, but there are solutions such as relying on derived measures, clustering and binning. ✓

b. Not really, no.

c. Yes, so they should be avoided altogether.

d. Yes, but there are solutions such as converting them to treemaps or node-link diagrams.

Your answer is correct.

Question 1

Correct

Mark 2.00 out of 2.00

Flag question

The mercator projection

a. Preserves the form, making the poles look larger than they actually are. ✓

b. Is the same as the Lambert Cylindrical projection.

c. Is very rarely used

d. Preserves the area

Your answer is correct.

Question 4

Correct

Mark 2.00 out of 2.00

Flag question

Match the type of projection with its description.

Conform — Preserves shape ✓

Azimuthal — Preserves direction from a ✓

Equal-area — Preserves area ✓

Your answer is correct.