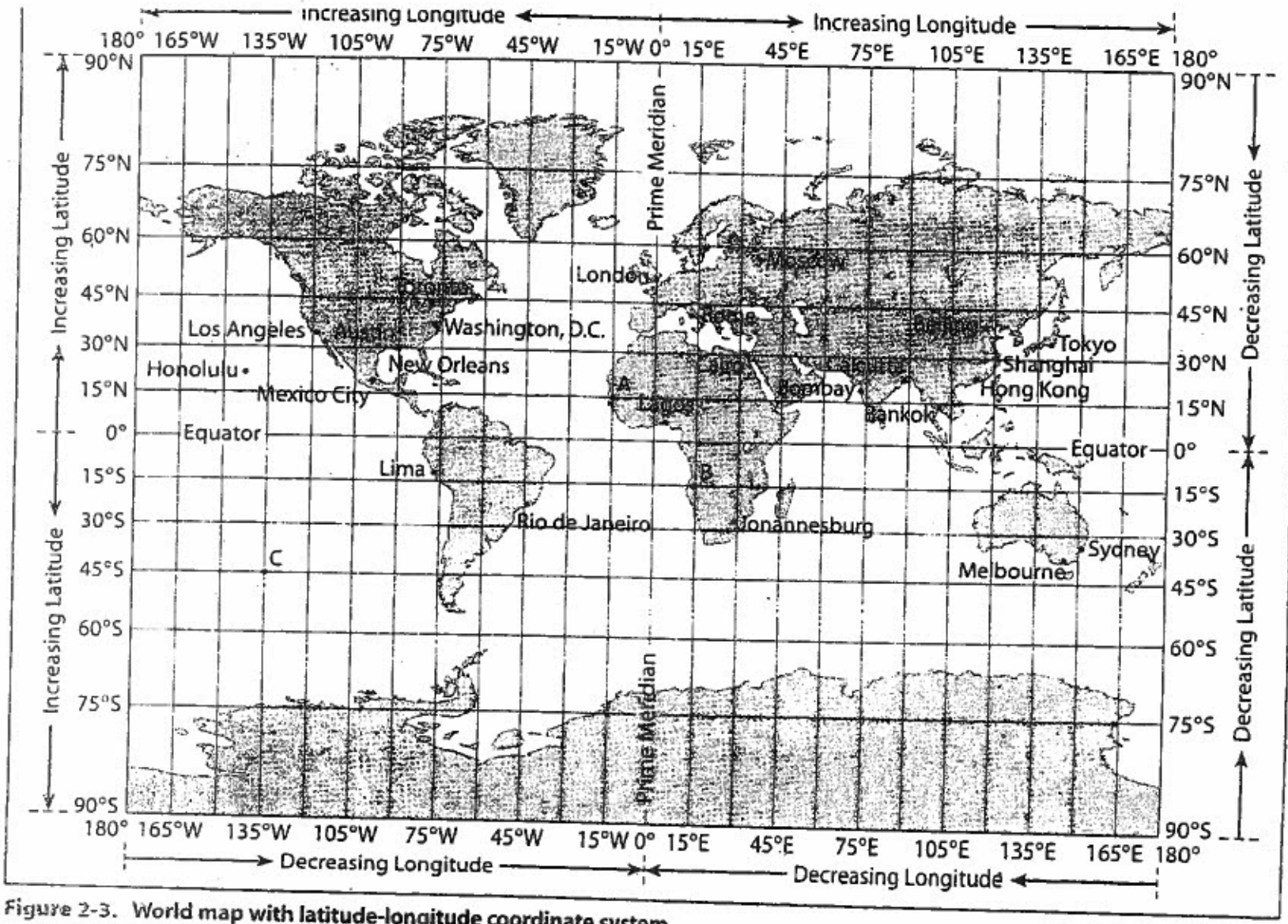



Figure 2-3. World map with latitude-longitude coordinate system

Using your labeled map, answer the following questions.

1. If it is 3PM at the Prime Meridian, what time is it at 45 degrees East?

2. If it is 3 PM at the Prime Meridian, what time is it at 45 degrees West?

3. If it is 6PM in California, what time is it in New York?

4. How many hours difference between 75 degrees West and 0 degrees?

5. If it is 1 AM at 165 degrees West on October 21st, what is the date and and time at 165 degrees East?

6. As you are heading out to school, what are students in Hawaii doing?

7. As you are leaving school for the day, what are students in England doing?

8. How many hours difference between 75 degrees West and 75 degrees East?

9. Recall our discussion and explain how longitude was devised.

10. If a person knows the sun time on the Prime Meridian and the local sun time (their location), what can be determined?

11. What is the longitude of our location?

12. If a ship is traveling West in the Atlantic Ocean, how will time change?

13. If an airplane is traveling East in the Pacific Ocean, how will time change?

## V. Fields - _____

_____

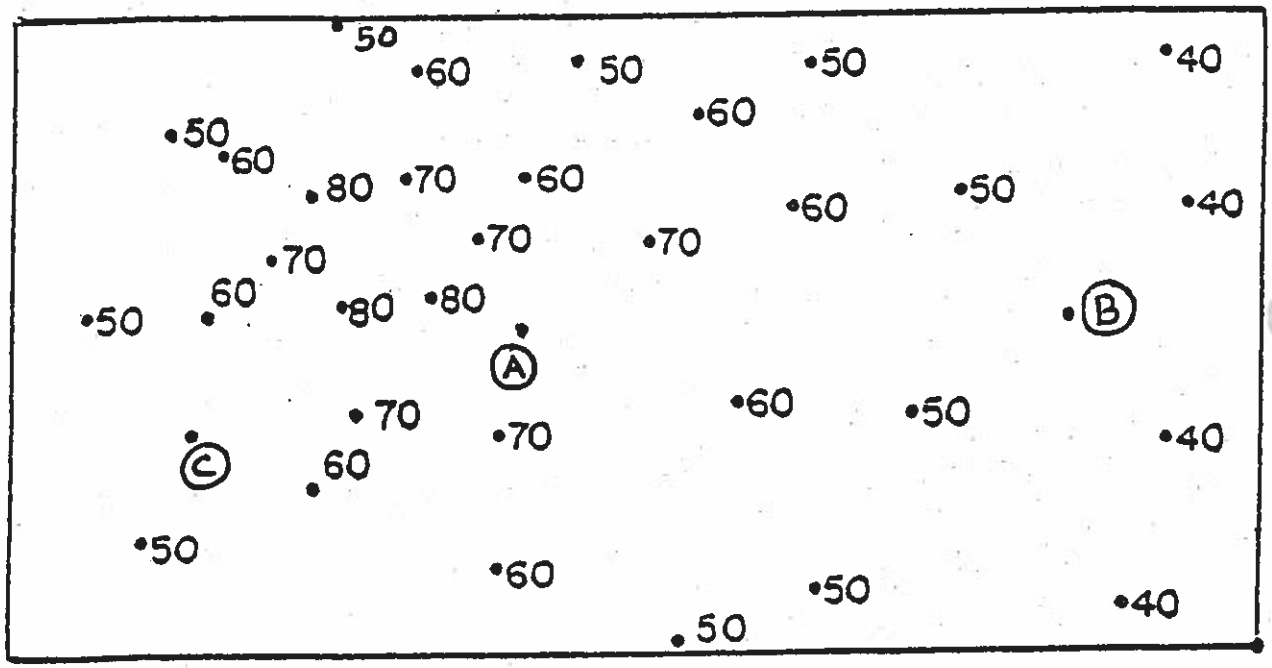
_____

A. Isolines -

_____

_____

B. The diagram below shows an elevation field map of a geographical region; the elevation is in feet (above sea level). Complete this field map by drawing elevation isolines for 40, 50, 60, 70 and 80 feet.




1. What is the approximate elevation of point

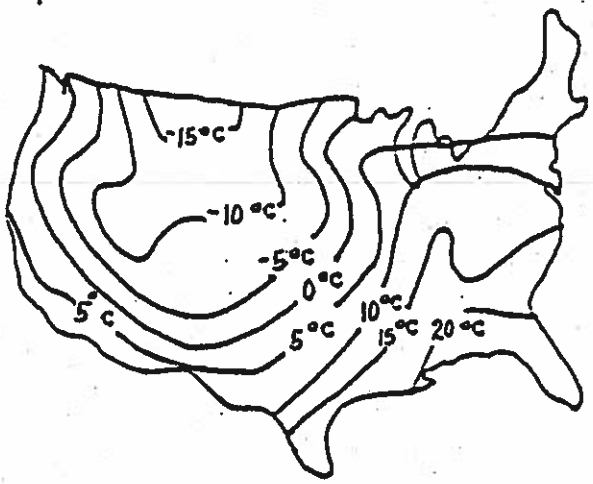
   A _____

   B _____

   C _____

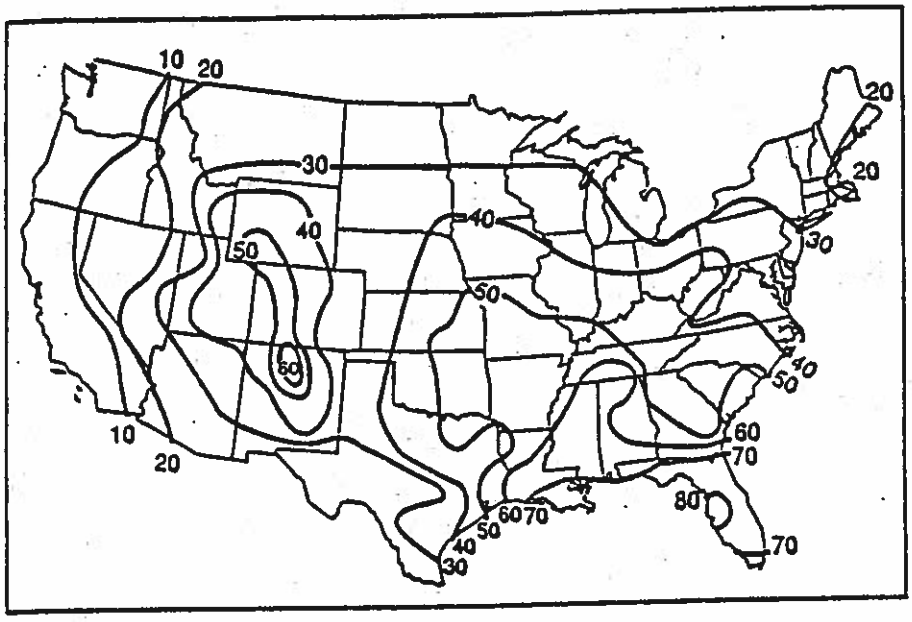
2. Isolines that show elevation are called _____.

C. The field map below shows weather data plotted for a January morning.




1. What measurable property is shown on this map? _____
2. Based on this property, the isolines on this map are called _____
3. What is the approximate measurement of this property for New York State? _____

D. The field map below shows the average yearly number of thunderstorms in the United States.




1. Approximately how many thunderstorms occur each year in:
   a. Albany, New York - _____
   b. Los Angeles, California - _____
   c. New Orleans, Louisiana - _____

# VI. Topographic Maps

... are maps of a elevation field

A. Topographic Maps show the elevation of the land by using contour lines, and show other natural and man-made features by using symbols.

B. Contour Line - _____

_____

Elevation - _____

_____

C. Contour interval - _____

_____

_____

D. Index Contour Line - _____

_____

_____

E. Depression Contour Line – Special contour lines used to show a hole or crater on Earth's surface. These lines are drawn like contour lines but are marked on the inside.

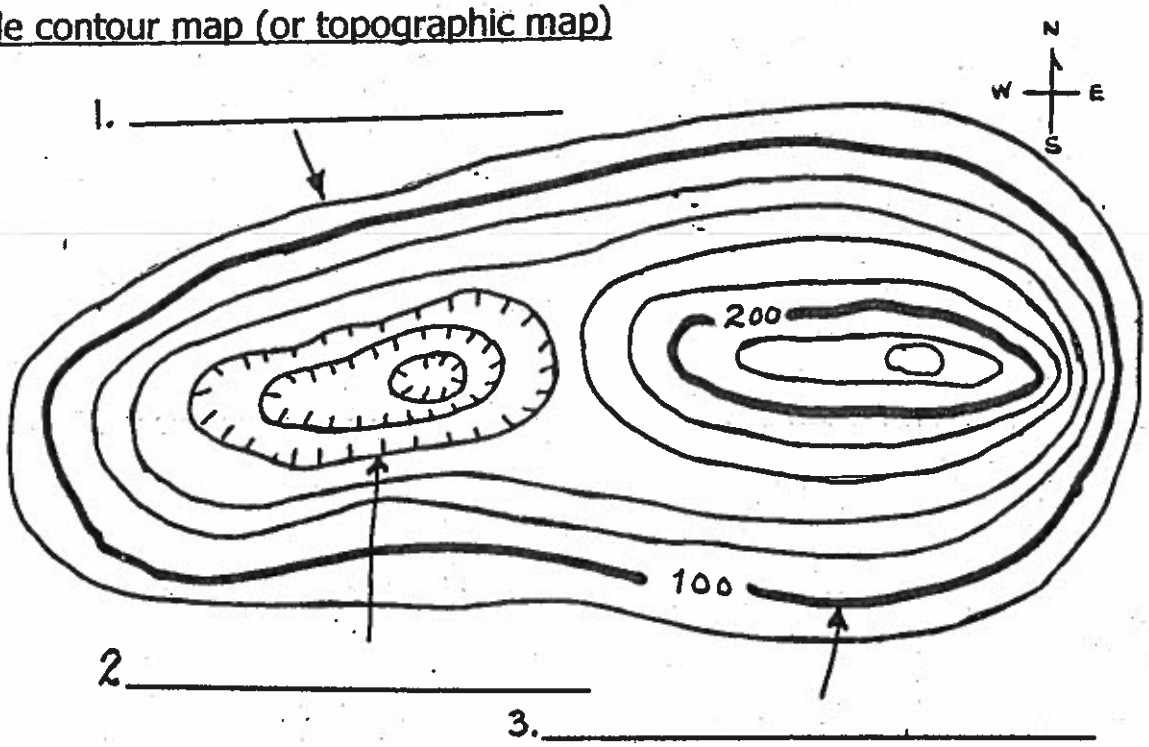
F. Bench Mark (B.M.) - _____

_____

_____

G. Spot Elevations – are the elevations of such places as road intersections, hilltops, lake surfaces and other points of special interest. These points are located on the map by a small cross (+), unless the location is obvious, such as certain road intersections or hilltops.

H. A simple contour map (or topographic map)




4. Contour Interval - _____
5. Highest possible elevation (of the hilltop)- _____
6. Which is the steepest side of the hill: north, south, east or west?
7. How do contour lines show a steeper slope?

   _____

8. What three (3) basic features of a landform do contour lines show?

   a. _____

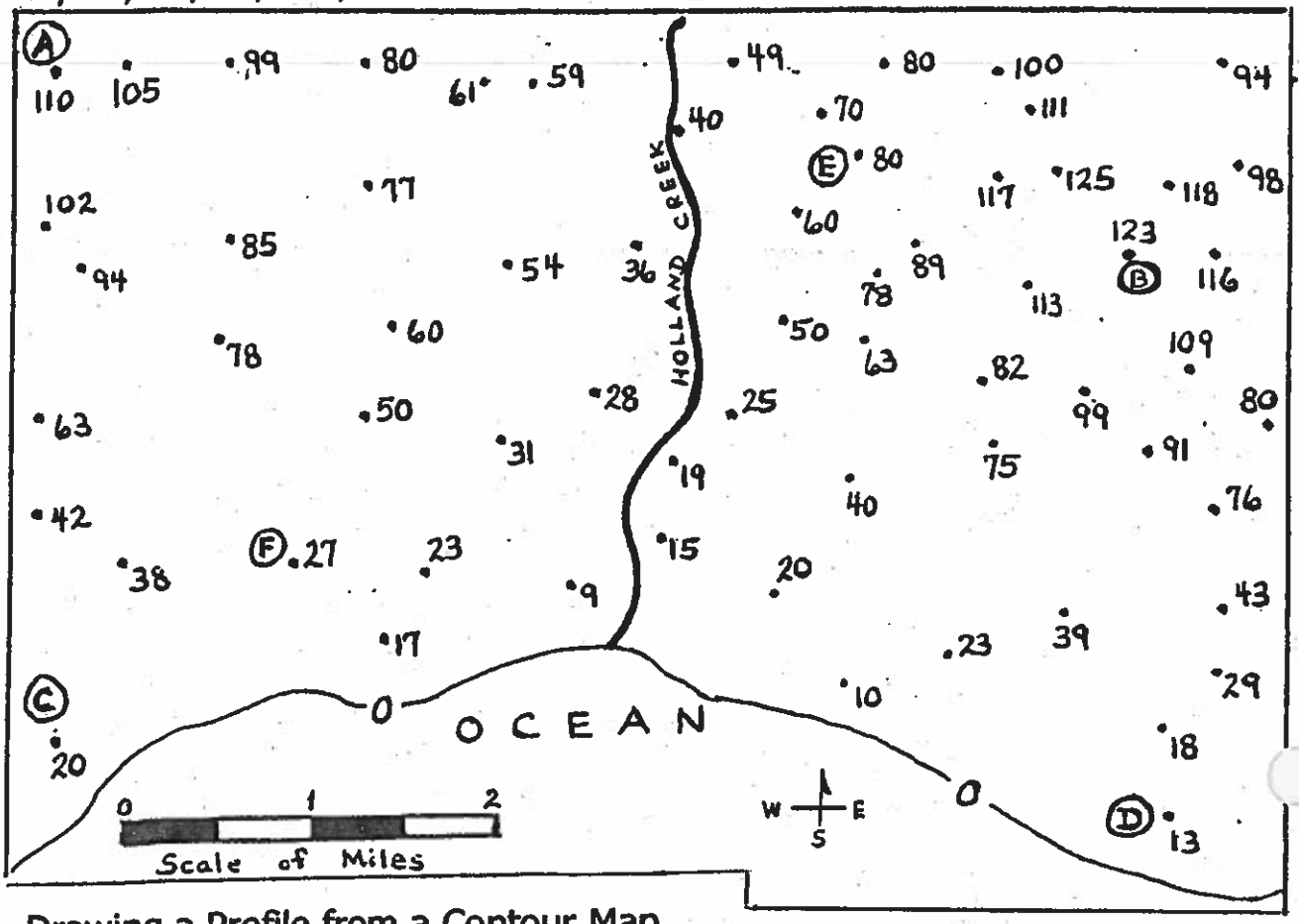
   b. _____

   c. _____

I. River Valleys (the law of V's) – contour lines bend upstream where they cross a river. This can be used to determine the direction in which a river is flowing.

# VIII. Topographic Map Skills

A. Drawing Contour Lines on a Field Map – draw contour lines for 20, 40, 60, 80, 100, 120 feet




B. Drawing a Profile from a Contour Map

C. Gradient- _____

_____

1. Formula:

2. Calculating Gradient

Use the elevation field map that you drew contour lines on (which is on the previous page) to calculate the gradient between:

a. point A and point C

Reference Table page = _____

b. point B and point D

c. point B and point E

d. point F and point C

# IX. Parts of Earth

A. The three "spheres" of outer Earth

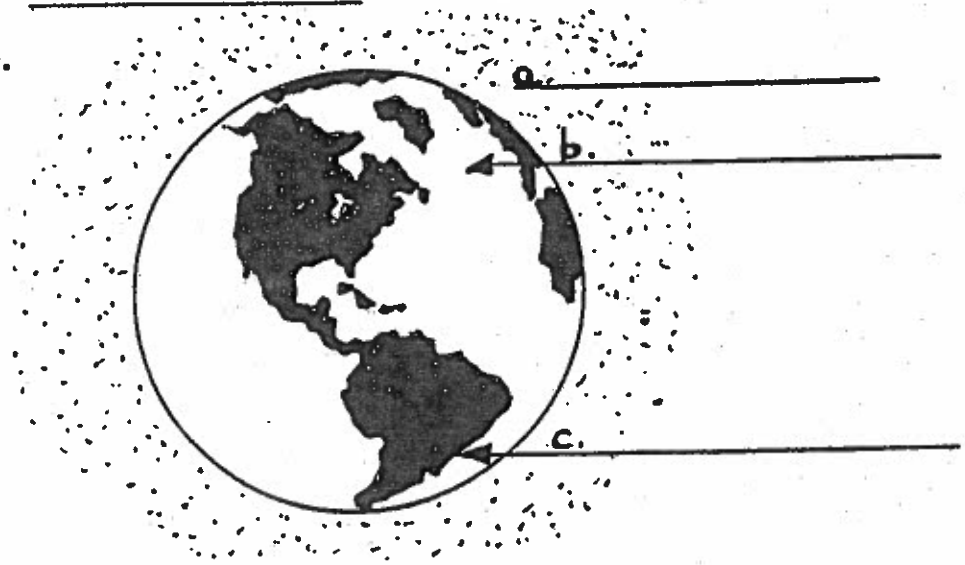
1. _____ - the shell of gases that surrounds Earth.

2. _____ - the waters of Earth; its oceans, seas, lakes and rivers.

3. _____ - the dense, solid outer shell of Earth composed of rock.

_____% of Earth's surface is covered by land.

4.

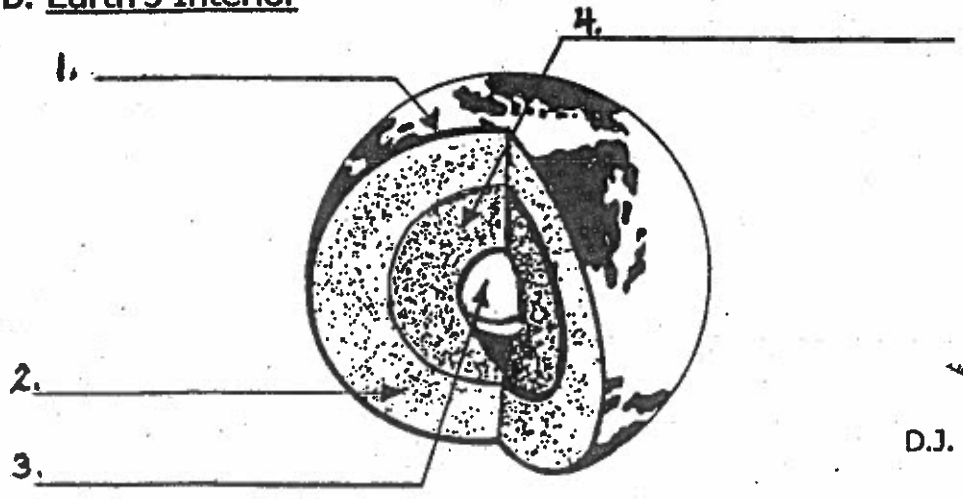



5. Which sphere of Earth is:

a. most dense? _____

b. least dense? _____

B. Earth's Interior

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