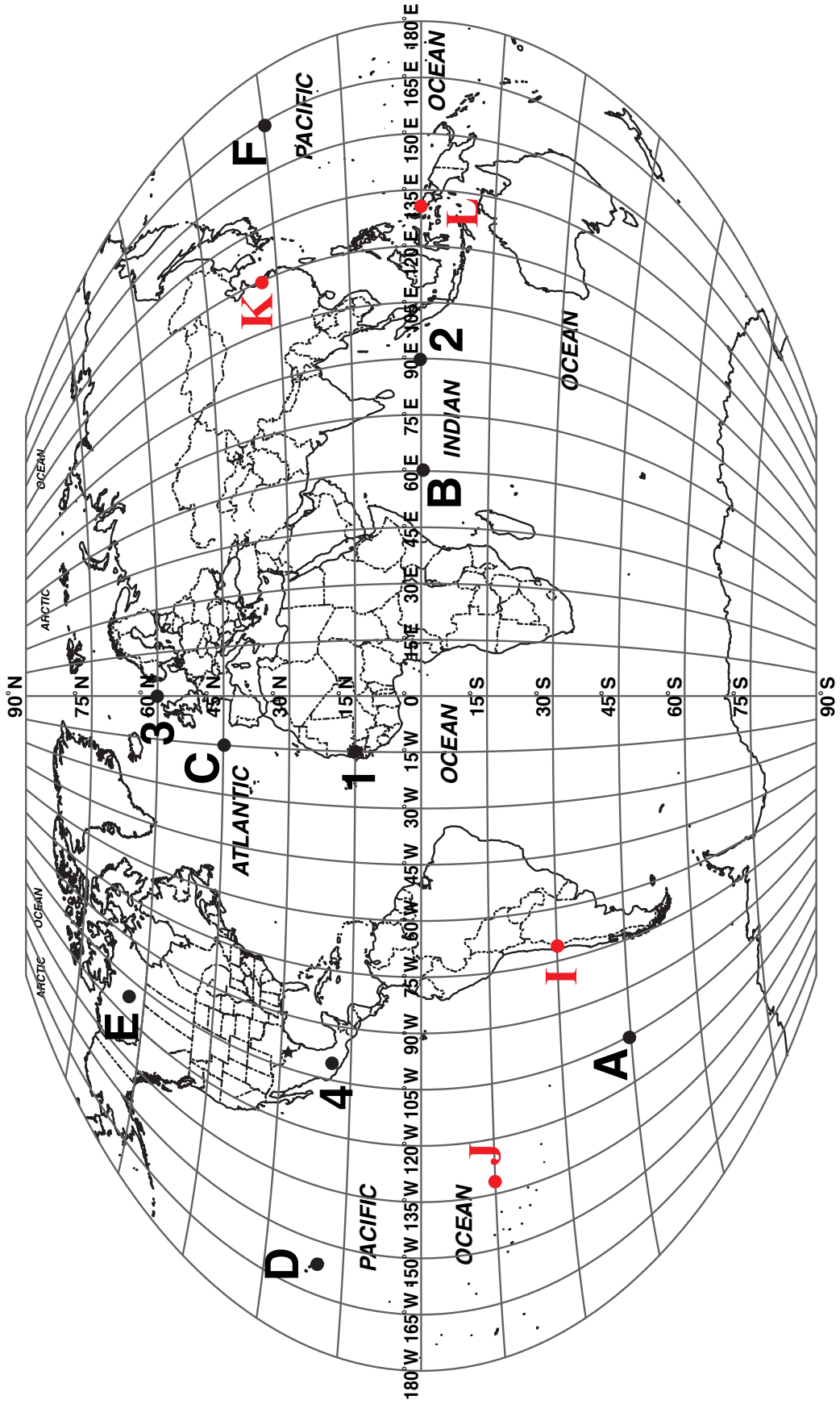
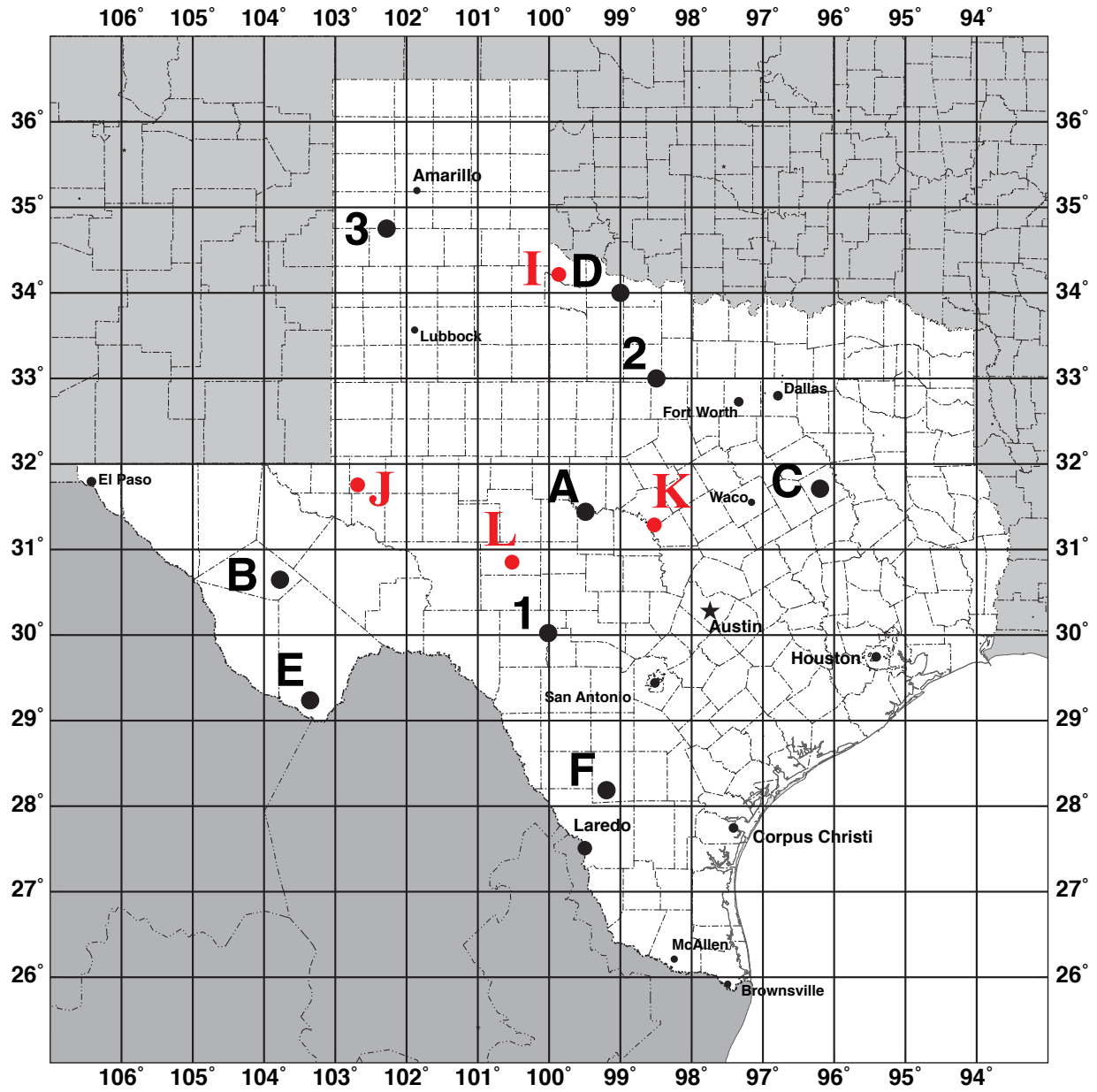


Laboratory Key #1 - Introduction to Latitude and Longitude

1. 90°
2. North Pole and South Pole
3. Depends on where you live.
4. 0° to 30° is low latitude
30° to 60° is middle latitude
60° to 90° is high latitude
5. multiple the answer to question #3 by 60 (1° of latitude is roughly 60 miles)
6. North America = Northern Hemisphere; Australia = Southern Hemisphere
7. no, you need longitude as well
8. the prime meridian is at the 0° longitude
9. Depends on where you live.
10. North America = Western Hemisphere; Australia = Eastern Hemisphere
11. A. 45°S, 105°W D. 20°N, 157°W
B. 0°, 60°E E. 65°N, 112°W
C. 45°N, 15°W F. 30°N, 165°E
12. See figure on page 2.
13. A. Scale A B. 4000 miles
14. A. Scale B B. 3900 miles
15. A. Scale C B. roughly 11,700 miles
16. The length of the scale changes (stretches) as you go toward either the north or south pole because the map distortion increases toward the poles.
17. A. 31°30' N, 99°30' W D. 34° N, 99° W
B. 30°45' N, 103°45' W E. 29°15' N, 103°20' W
C. 31°45' N, 96°15' W F. 28°10' N, 99°15' W
18. See figure on page 3.





19. Laredo is approximately $27^{\circ}30'$ N, $99^{\circ}30'$ W
20. Austin = $30^{\circ}14'$ N, $97^{\circ}45'$ W
Houston = $29^{\circ}45'$ N, $95^{\circ}25'$ W
Corpus Christi = $27^{\circ}45'$ N, $97^{\circ}28'$ W
Amarillo = $35^{\circ}13'$ N, $101^{\circ}50'$ W
21. North = Amarillo
West = Amarillo
South = Corpus Christi
East = Houston
22. A. Scale B B. 270 miles
23. A. Scale A B. 243 miles
24. Only an approximate because it does not lie exactly along the 33° N Latitude line.