MAPPING EARTH’S SURFACE VOCABULARY
1. longitude
2. great circle
3. parallel
4. meridian
5. latitude

a. any circle that runs east and west around the Earth
b. semicircle that runs pole to pole
c. angular distance north or south of the equator
d. a circle that divides the globe in half or marks its circumference
e. angular distance east or west of the prime meridian
1. Science of mapmaking
2. Imaginary line that separates Earth into northern and southern hemispheres
3. Distance in degrees north or south of the equator
4. Distance in degrees east or west of the prime meridian
5. Reference point for longitude that passes through Greenwich, England, and represents $0^\circ$

a. prime meridian
b. longitude
c. cartography
d. equator
e. latitude
Maps that show changes in elevation of Earth’s surface are called (12) _________. On this kind of map, points of equal elevation are connected by (13) ________________. The difference in elevation between two side-by-side contour lines is called the (14) ________________. Contour lines whose elevation is marked by a number on the map are known as (15) ________________. Contour lines that indicate depressions have (16) ________________, or short lines at right angles to the contour lines.
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>equator</td>
<td>0° latitude, 180°E longitude</td>
</tr>
<tr>
<td>2</td>
<td>prime meridian</td>
<td>0° latitude, 0° longitude</td>
</tr>
<tr>
<td>3</td>
<td>International Date Line</td>
<td>180°E longitude, 0° latitude</td>
</tr>
<tr>
<td>4</td>
<td>15°S latitude, 90°E longitude</td>
<td>15°S latitude, 90°E longitude</td>
</tr>
<tr>
<td>5</td>
<td>5°N latitude, 165°E longitude</td>
<td>5°N latitude, 165°E longitude</td>
</tr>
<tr>
<td>6</td>
<td>45°S latitude, 15°E longitude</td>
<td>45°S latitude, 15°E longitude</td>
</tr>
<tr>
<td>7</td>
<td>30°N latitude, 165°W longitude</td>
<td>30°N latitude, 165°W longitude</td>
</tr>
<tr>
<td>8</td>
<td>15°S latitude, 60°E longitude</td>
<td>15°S latitude, 60°E longitude</td>
</tr>
<tr>
<td>9</td>
<td>30°N latitude, 120°W longitude</td>
<td>30°N latitude, 120°W longitude</td>
</tr>
<tr>
<td>10</td>
<td>30°S latitude, 15°E longitude</td>
<td>30°S latitude, 15°E longitude</td>
</tr>
</tbody>
</table>
3. Large, relatively flat areas of land
4. Large areas of horizontal rocks that have been uplifted and that rise steeply above the land around the rocks
5. Distance above or below sea level
6. Grassy wetlands usually flooded with water
7. Broad, flat lowlands along coastlines
8. Land features that rise high above the surrounding land
9. Type of mountains formed when rock layers are squeezed from opposite sides
10. Type of mountains formed when crust was pushed up by forces inside Earth
11. Type of mountains formed when huge tilted blocks of rocks are separated from surrounding rock by faults
12. Type of mountains formed when molten material reaches Earth’s surface through a weak area in the crust

a. folded mountains
b. plains
c. marshes
d. fault-block mountains
e. elevation
f. plateaus
g. volcanic mountains
h. mountains
i. coastal plains
j. upwarped mountains
1. An imaginary line that circles Earth exactly halfway between the North and South poles
2. A reference point for east/west grid lines that runs through Greenwich, England, from the North Pole to the South Pole
3. A line at the 180 degree meridian
4. Lines that run north and south and determine locations east or west of the prime meridian
5. Lines that run parallel to the equator and determine north and south locations
• Draw a view of Earth.
• Label important features on the diagram with the following terms.
  equator                  prime meridian                  90°S latitude
  north pole               0° latitude                       90°N latitude
  south pole
<table>
<thead>
<tr>
<th>Description</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. the distance north or south of the equator</td>
<td>a. longitude</td>
</tr>
<tr>
<td>2. the distance east or west of the prime meridian</td>
<td>b. globe</td>
</tr>
<tr>
<td>3. the line of latitude around the middle of the globe at 0 degrees</td>
<td>c. eastern, western</td>
</tr>
<tr>
<td>4. the line of longitude at 0 degrees</td>
<td>d. prime meridian</td>
</tr>
<tr>
<td>5. the two hemispheres formed by the equator</td>
<td>e. northern, southern</td>
</tr>
<tr>
<td>6. the two hemispheres formed by the prime meridian and the 180° meridian</td>
<td>f. latitude</td>
</tr>
<tr>
<td>7. a spherical model of Earth</td>
<td>g. equator</td>
</tr>
</tbody>
</table>
Locate the *equator* and the *prime meridian* and write these terms in the correct boxes. In the other two boxes write *longitude* or *latitude* to identify these lines.

1. 
2. 
3. 
4.
5. The distance north or south from the equator is called ____________________.

6. Lines of latitude are also called ____________________.

7. The imaginary circle halfway between the poles is called the ____________________.

8. The ____________________ is 90°N latitude.
9. The distance east and west from the prime meridian is called ____________________.

10. The line that is designated as 0° longitude is called the ____________________.

11. Lines of latitude and longitude cross to form a(n) ____________________ system on globes and maps.
PART A  Label the diagram below with the terms *meridians*, *parallels*, and *equator*. Shade the Northern Hemisphere with your pencil.
3. On a topographic map, a(n) __________________ connects points of equal elevation.

4. The difference in elevation between one contour line and the next is called the ____________________.

5. The difference in elevation between the highest and lowest points on a map is called ____________________.

6. Contour lines that are close together show a(n) ____________________ slope.

7. Contour lines that are far apart show a(n) ____________________ slope.

8. A dark line used to make topographic maps easier to read is called a(n)
Find the latitude and longitude of the points marked A through F. Be sure to tell if the latitude is north or south and if the longitude is east or west.

Point A _____________
Point B _____________
Point C _____________
Point D _____________
Point E _____________
Point F _____________

Using degrees of latitude and longitude, describe where South America is on the map.
1. contour line
   a. a volume of rock of a given type and age range
2. topography
   b. height above sea level of land or an object
3. relief
   c. size and shape of Earth’s surface features
4. geologic unit
   d. line connecting points of equal elevation on a map
5. elevation
   e. difference between the highest and lowest elevations