Mapping Our World
Section 2.1 Latitude and Longitude

Main Idea

Details

Skim Section 1 of your text. Write three questions that come to mind from reading the headings and the illustration captions.

1. ____________________________
2. ____________________________
3. ____________________________

New Vocabulary

cartography

equator
line of latitude
line of longitude
prime meridian
International Date Line

Use your text to define the following term.

_ ____________________________

Use the terms to label the figure below.

Academic Vocabulary

parallel

Define the following term.

_ ____________________________

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Section 2.1 Latitude and Longitude (continued)

Main Idea

**Latitude**
*Use with pages 27–28.*

Organize information about latitude by completing this graphic organizer. Use Figure 2-1 and other information in your text.

- They run _______ to the equator.
- Distances are in degrees _______ or _______ of the equator.
- The _______ is at 0° latitude.
- The poles are at _______ latitude.

Summarize the information about degrees of latitude by completing the table.

<table>
<thead>
<tr>
<th>Degrees of Latitude</th>
<th>Symbol</th>
<th>Actual Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Details

**Longitude**
*Use with page 29.*

Complete each sentence to help you remember information about longitude.

_lines of longitude are also known as _______. Longitude is distance in degrees ____ or ____ of the prime meridian. The _______ is the reference point for meridians. It represents _° longitude. The prime meridian goes through __________. Points west of the prime meridian are numbered from _° to ____° west longitude. Points east of the prime meridian are numbered from 0° to 180° _______.

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_degrees of latitude are _______. They run parallel to the equator. Distances are in degrees _______ or _______ of the equator. The equator is at 0° latitude. The poles are at 90° latitude.
Section 2.1 Latitude and Longitude (continued)

**Main Idea**

*Use with pages 27–28.*

**Compare and contrast** information about latitude and longitude. Place each statement in the Venn diagram to show whether it is true for latitude, longitude, or both. Two statements have already been written in for you.

- Lines are parallel.
- Lines form circles.
- Degrees cover consistent distances.
- Degrees do not cover consistent distances.
- Necessary to precisely locate positions on Earth

- Lines converge at a point.
- Lines form semicircles.

### Venn Diagram

Longitude
- Lines converge at a point.
- Degrees do not cover consistent distances.
- Necessary to precisely locate positions on Earth

Latitude
- Lines form circles.
- Degrees cover consistent distances.

Both

**Time Zones**

*Use with page 31.*

**Analyse** the figure below showing U.S. time zones. Assume that it is 9:00 in the Mountain time zone. Draw the hands on the other clocks to show the time it would be in each of the other U.S. time zones.

**Synthesise** Write the instructions you would give a classmate to locate the point 27°18’N, 19°2’E on a globe.
Mapping Our World
Section 2.2 Types of Maps

**Main Idea**

**Details**

**Skim** Section 2 of your text. List the three map projections mentioned in the headings and illustration captions.

1.  
2.  
3.  

**New Vocabulary**

In the left column, write the terms defined below.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>gnomonic projection</td>
<td>a map made by projecting points and lines from a globe onto a cone</td>
</tr>
<tr>
<td>Mercator projection</td>
<td>a map that has parallel lines of latitude and longitude</td>
</tr>
<tr>
<td>conic projection</td>
<td>a map that shows changes in elevation of Earth’s surface</td>
</tr>
<tr>
<td>topographic map</td>
<td>a map made by projecting points and lines onto a piece of paper that touches a globe at a single point</td>
</tr>
<tr>
<td>map scale</td>
<td>the ratio between distances on a map and actual distances on the surface of Earth</td>
</tr>
<tr>
<td>contour interval</td>
<td>the difference in elevation between two side-by-side contour lines on a map</td>
</tr>
<tr>
<td>map legend</td>
<td>a table that explains what the symbols on a map represent</td>
</tr>
<tr>
<td>contour line</td>
<td>a line on a map that connects points of equal elevation</td>
</tr>
</tbody>
</table>

**Define the following term.**

**Academic Vocabulary**

**distort**

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Mapping Our World  17
Section 2.2 Types of Maps (continued)

Main Idea

Mercator Projections
Use with page 32.

Conic Projections
Use with page 32.

Gnomonic Projections
Use with page 33.

Details

Complete the table to organize information about Mercator projections.

<table>
<thead>
<tr>
<th>Mercator Projections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Made by</td>
</tr>
<tr>
<td>Advantages</td>
</tr>
<tr>
<td>Disadvantages</td>
</tr>
<tr>
<td>Uses</td>
</tr>
</tbody>
</table>

Organize information about conic projections by filling in the graphic organizer.

Complete the following sentences to help you understand gnomonic projections.

Gnomonic projections are made by ________________________________

The advantage of these projections ________________________________

The disadvantage of gnomonic projections is ____________________________

They are used by ________________________________