

## World Map Lesson 3 - Longitude on World Maps - Grade 6+

**Activity Goal** To use the longitude part of the global grid system to find places on the world map.

**Materials Needed:** A pencil and a Cram World map.

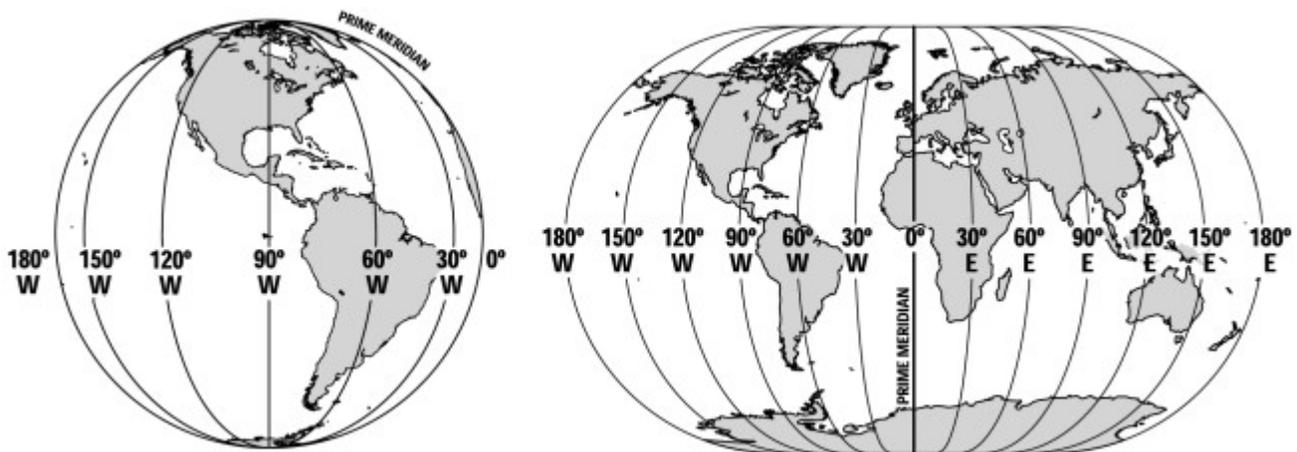
### Lesson

#### Meridians of Longitude

The other half of the global grid system are the **meridians of longitude**.

Meridians of longitude are imaginary lines that run from the North Pole to the South Pole. A north and south line can be called just meridian or just longitude. Meridians of longitude are not parallel to each other.

One special meridian is called the **Prime Meridian**. The Prime Meridian is the meridian that passes through the town of Greenwich, England, which is near London.



Longitude measures the distance east and west of the Prime Meridian. Each meridian is

numbered and is measured in degrees ( $^{\circ}$ ). There are 360 degrees all the way around the Earth. The numbering starts with the Prime Meridian, which is at zero degree ( $0^{\circ}$ ).

As you move east from the Prime Meridian, each meridian of longitude is numbered from  $0^{\circ}$  to  $180^{\circ}$  E. As an example,  $15^{\circ}$  E is the meridian that is 15 degrees to the east of the Prime Meridian.

As you move west from the Prime Meridian, each meridian of longitude is numbered from  $0^{\circ}$  to  $180^{\circ}$  W. As an example,  $95^{\circ}$  W which is the meridian that is 95 degrees to the west of the Prime Meridian.

Find the Prime Meridian on the world map. Notice that the Prime Meridian does not touch the North Pole. In fact, the poles do not appear on the map. This often happens on world maps. Sometimes when a spherical object (the Earth) is drawn on a flat surface (a world map), the poles do not show. The upper left and right corners of the world map show special round maps showing the North and South Pole areas.

Find the  $180^{\circ}$  meridian near the east edge (right side) of the world map. The  $180^{\circ}$  meridian of longitude is the joining line for the longitude lines running east and west from the Prime Meridian ( $0^{\circ}$ ). The  $180^{\circ}$  meridian of longitude and the Prime Meridian are on opposite sides of the Earth.

??? Use the world map to help find an answer to these questions.

Trace the Prime Meridian from the south (bottom) to the north (top) of the map. List the countries that the Prime Meridian runs through (or just barely touches) from south to north in the spaces provided below.

1.

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2.

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3.

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4.

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5.

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8.

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9.

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??? Locate each of the five cities listed below on the world map. Then identify the meridian of longitude that is closest to the city. Write the answer in the space provided, and be sure to note if it is east or west of the Prime Meridian.

- 10. Osaka, Japan \_\_\_\_\_
- 11. Alexandria, Egypt \_\_\_\_\_
- 12. New Orleans, southern United States \_\_\_\_\_
- 13. Ottawa, southeastern Canada \_\_\_\_\_
- 14. Sydney, southeastern Australia \_\_\_\_\_

??? Find the 90° E meridian on the world map. 90° E refers to the meridian that is 90 degrees east of the Prime Meridian. List the countries that the 90° E meridian runs through from the south to the north.

- 15. \_\_\_\_\_
- 16. \_\_\_\_\_
- 17. \_\_\_\_\_
- 18. \_\_\_\_\_
- 19. \_\_\_\_\_
- 20. \_\_\_\_\_