

## World Map Lesson 2 - Latitude on World Maps - Grade 6+

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

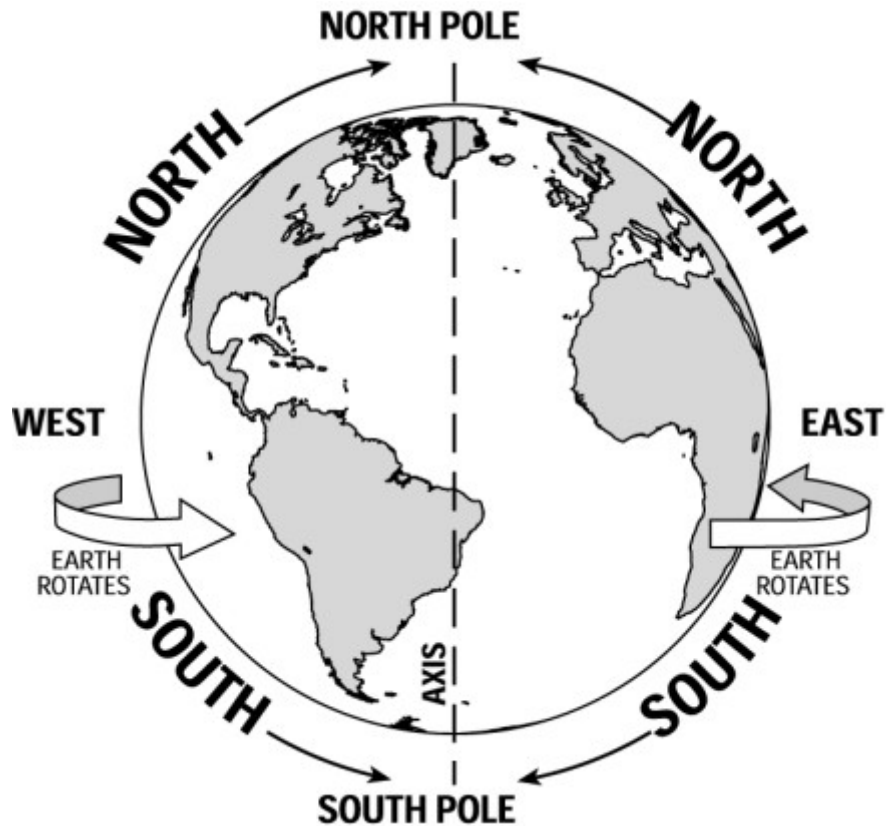
**Materials Needed:** A pencil and a Cram World map.

### Lesson

#### The Poles and Directions

A **global grid** system is used to locate places on a map. To understand the global grid system, some basic facts about the Earth must be understood.

The Earth is a sphere, or a round ball (not perfectly round, but that only matters to scientists). The Earth spins, or rotates, on an imaginary axis. This imaginary axis passes through the center of the Earth. It emerges from the Earth's surface at 2 points, the **North Pole** and the **South Pole**.



These 2 poles are also 2 of the cardinal (major) directions, **north** and **south**. North is towards the North Pole. South is towards the South Pole.

The direction in which the Earth rotates (or turns) defines the other 2 cardinal directions, **east** and **west**. The Earth rotates from the west to the east. East is to your right side as you face the North Pole. West is to your left side as you face the North Pole.

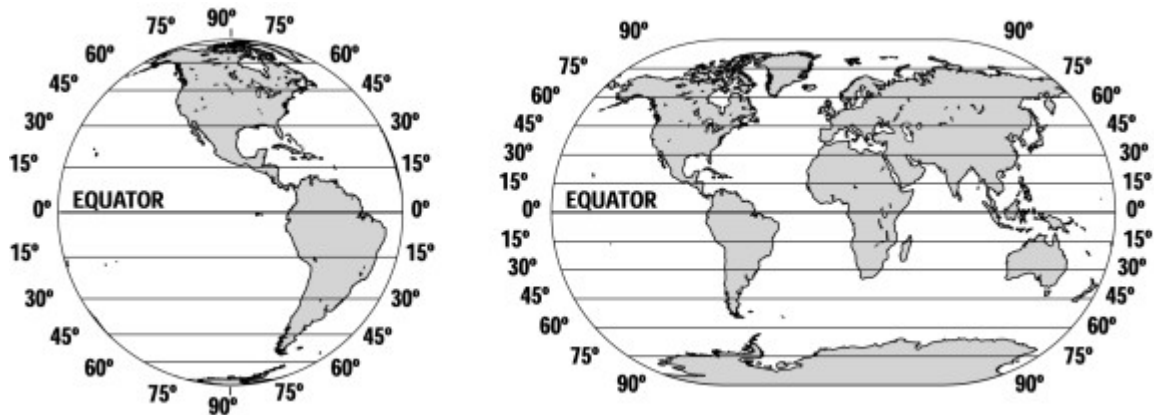
### **Parallels of Latitude**

The **Equator** is an imaginary line that completely circles the Earth. It is part of the global grid system. It is halfway between the North Pole and the South Pole. The Equator runs east and west.

Other imaginary lines also run to the east and west. These lines are called parallels of

**latitude.** The lines can be called just parallels or just latitudes. These lines are called parallels because they run parallel to the Equator. The Equator and other parallels of latitude are one half of the global grid system.

Each parallel is numbered to show how far it is north or south from the Equator. This numbering system is measured in degrees. The symbol for **degrees** is °. There are 90 degrees between the Equator and each pole.



Moving north from the Equator, parallels of latitude are numbered from zero degrees (0°) at the Equator to 90 degrees north (90° N) at the North Pole. For example, 20° N refers to the parallel that is 20 degrees north of the Equator.

Moving south from the Equator, parallels of latitude are numbered from zero degrees (0°) at the Equator to 90 degrees south (90° S) at the South Pole. For example, 40° S refers to the parallel that is 40 degrees south of the Equator. Remember, latitude measures the distance north and south from the Equator.

??? Use a world map to help you find the answer to the following questions.

Trace the Equator (0° latitude) from the east (right side) to the west (left side) of the world map. List the oceans and continents that the Equator runs through. Write your answers in order (one ocean will be listed twice).

1.

5.

2.

6.

3.

4.

7.

??? Locate the cities listed below on the world map. Then identify the parallel of latitude that is closest to the city. Write the answer in the space provided.

8. Shanghai, eastern China \_\_\_\_\_

9. Cairo, Egypt \_\_\_\_\_

10. Philadelphia, eastern United States \_\_\_\_\_

11. St. Petersburg, northwestern Russia \_\_\_\_\_

12. Perth, western Australia \_\_\_\_\_

13. Houston, southern United States \_\_\_\_\_

14. Belo Horizonte, southeastern Brazil \_\_\_\_\_