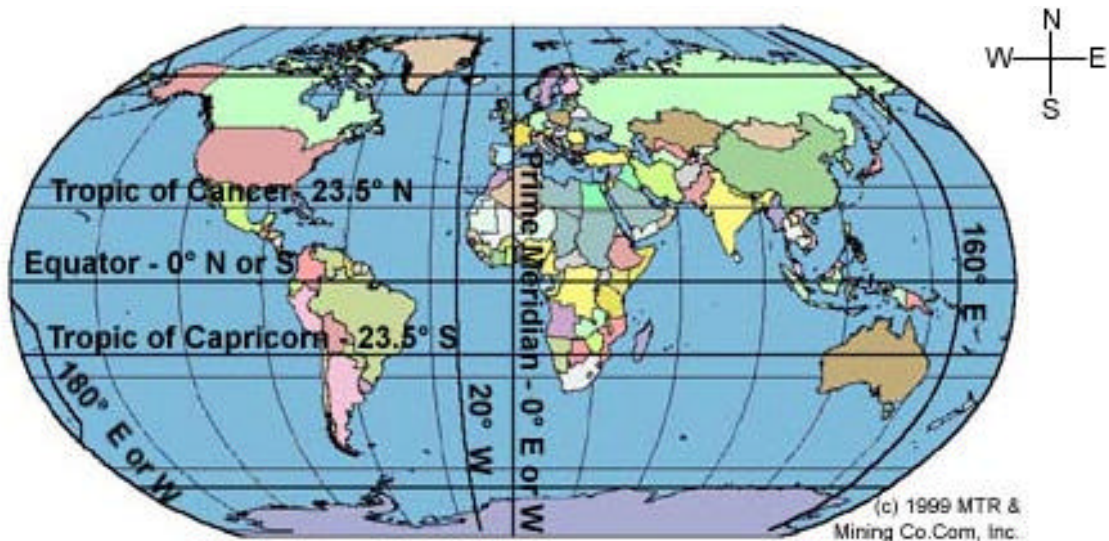


Look at this map:



This map shows the planet Earth. Earth is divided into sections using imaginary lines. This is so that people can measure distances on Earth.

Look at the line that runs through the middle of Earth, from one side to the other (east to west). This line is the **Equator**. The Equator is a very important line. It divides Earth exactly into two halves. The top half of Earth is the **Northern Hemisphere**. The bottom half of Earth is the **Southern Hemisphere**.

The Equator is at  $0^\circ$  (degrees) for the north and south measurements. If you travel **north** of the Equator 25 degrees, you will be at  $25^\circ$  N. If you travel **south** of the Equator 24 degrees, you will be at  $-25^\circ$  S. Anything south of the Equator is shown with a minus sign before it.

On the Equator, the sun is right overhead at noon on the two **equinoxes**. These happen near March and September 21<sup>st</sup>.

Two other very important lines run east to west. Look at the map again. The big line above the Equator is the **Tropic of Cancer**. The big line below the Equator is the **Tropic of Capricorn**. These lines are about  $23.5^\circ$  away from the Equator.

The tropics are important because the sun is directly above them on the two **solstices**. These happen near June and December 21<sup>st</sup>. June 21<sup>st</sup> is the



History Lesson 1  
*California: A Golden State (Grade 4)*

Instruction 1-1  
*Where in the World is California?*

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beginning of summer in the Northern Hemisphere. It is the beginning of winter in the Southern Hemisphere. On December 21<sup>st</sup>, winter begins in the Northern Hemisphere. At the same time, summer begins in the Southern Hemisphere. So while the United States, which is in the Northern Hemisphere, has summer, it is winter in Australia, which is in the Southern Hemisphere.

Now look at the map again. The **Prime Meridian** is the line that divides Earth from top to bottom. It is at 0° East or West. Anything west of the Prime Meridian is shown with a minus sign in front of it.

The lines that run from top to bottom (north to south) are lines of **longitude**. To remember this, think of up to down as being **long—longitude**. These lines measure how far a place is, east or west, from the Prime Meridian.

The lines that run from side to side (west to east) are lines of **latitude**. They measure how far north or south a place is from the Equator.

At the very top of Earth, farthest from the Equator, is the **North Pole**. At the bottom of Earth is the **South Pole**.

Now look at this map:



This map shows the United States in yellow, except for California, which is red on this map. California is on the west side of the United States. It is next to the Pacific Ocean. California is bordered to the north by Oregon. It is bordered to the east by Arizona and Nevada. These are all states in the United States. The country of Mexico borders California to the south.

California is 770 miles long and 250 miles wide at its most distant points. It is the third largest state. Only Alaska and Texas are bigger.

From north to south, California falls into these lines of longitude:  $114^{\circ} 8' W$  to  $124^{\circ} 24' W$ . From east to west, California falls into these lines of latitude:  $32^{\circ} 30' N$  to  $42^{\circ} N$ . You can find out where a city in California falls by taking two steps. First, count **across** the degrees of longitude. Then, count **down** the degrees of latitude. Look at the map below.



This map shows the northern half of California. The numbers at the **top** of the map show the degrees of **longitude**. The numbers on the **left** side of the map show the degrees of **latitude**.

Sacramento, the capital of California, is marked with a red dot. Find out where Sacramento falls. First, count over the degrees of longitude at the top of the map until you are directly above Sacramento. Can you see that it is almost at  $122^\circ$ ? This means that it is almost  $122^\circ$  west of the Prime Meridian.

Now count down using the latitude numbers on the left side of the map. You can see that Sacramento is between  $40^\circ$  and  $38^\circ$ . It is actually exactly  $38.58^\circ$  north of the Equator. You can use these steps to find the location of any place on Earth.