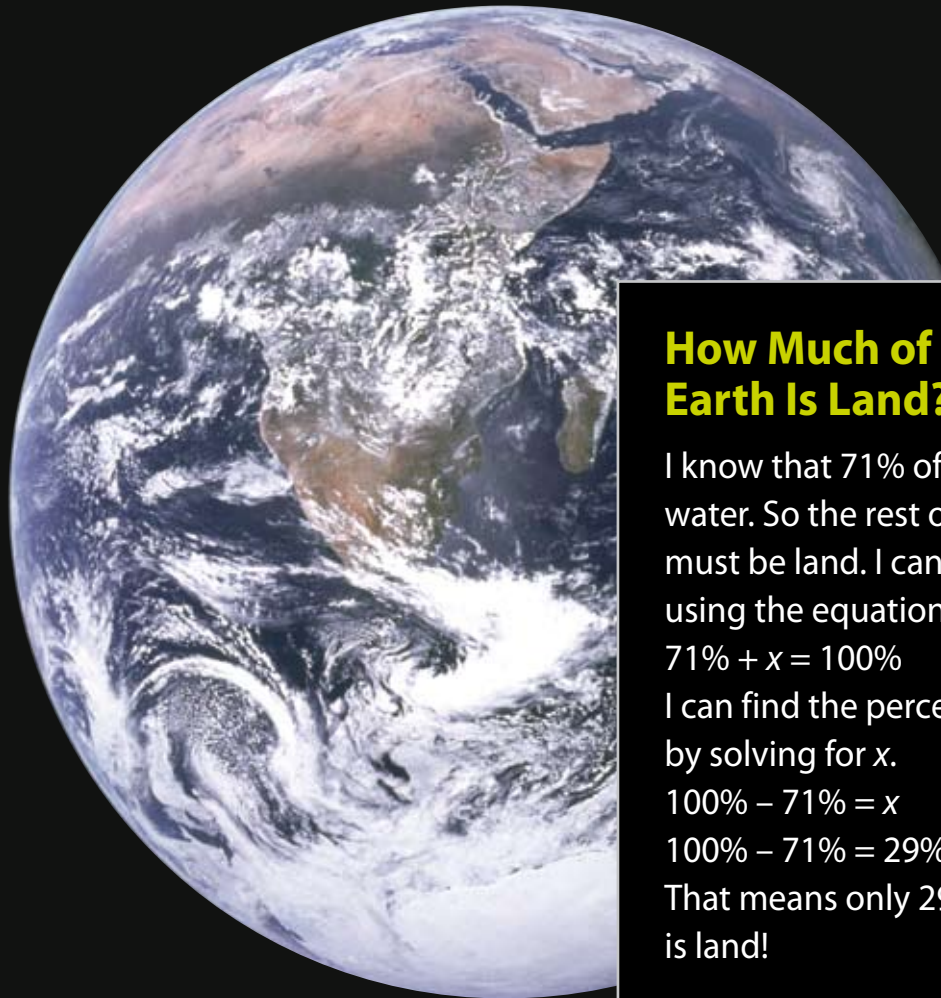


# Earth

Earth is the largest of the inner planets. It has plenty of oxygen in the air, and 71% of its surface is covered with water. This is why it is the only planet in our solar system that supports life—that we know of.

The distance between the sun and Earth is around 93 million miles (150 million km). That is about  $2\frac{1}{2}$  times farther from the sun than Mercury is.



## How Much of Earth Is Land?

I know that 71% of Earth is water. So the rest of Earth,  $x$ , must be land. I can show that using the equation:

$$71\% + x = 100\%$$

I can find the percentage of land by solving for  $x$ .

$$100\% - 71\% = x$$

$$100\% - 71\% = 29\%$$

That means only 29% of Earth is land!

The atmosphere (AT-muhs-fear) of Earth is made of 77% nitrogen and 21% oxygen. There are also very small amounts of carbon dioxide and other gases.

The Earth's surface temperature varies. The North and South Poles can be at temperatures far below freezing. Yet temperatures in some desert areas can get up to 134°F (57°C).

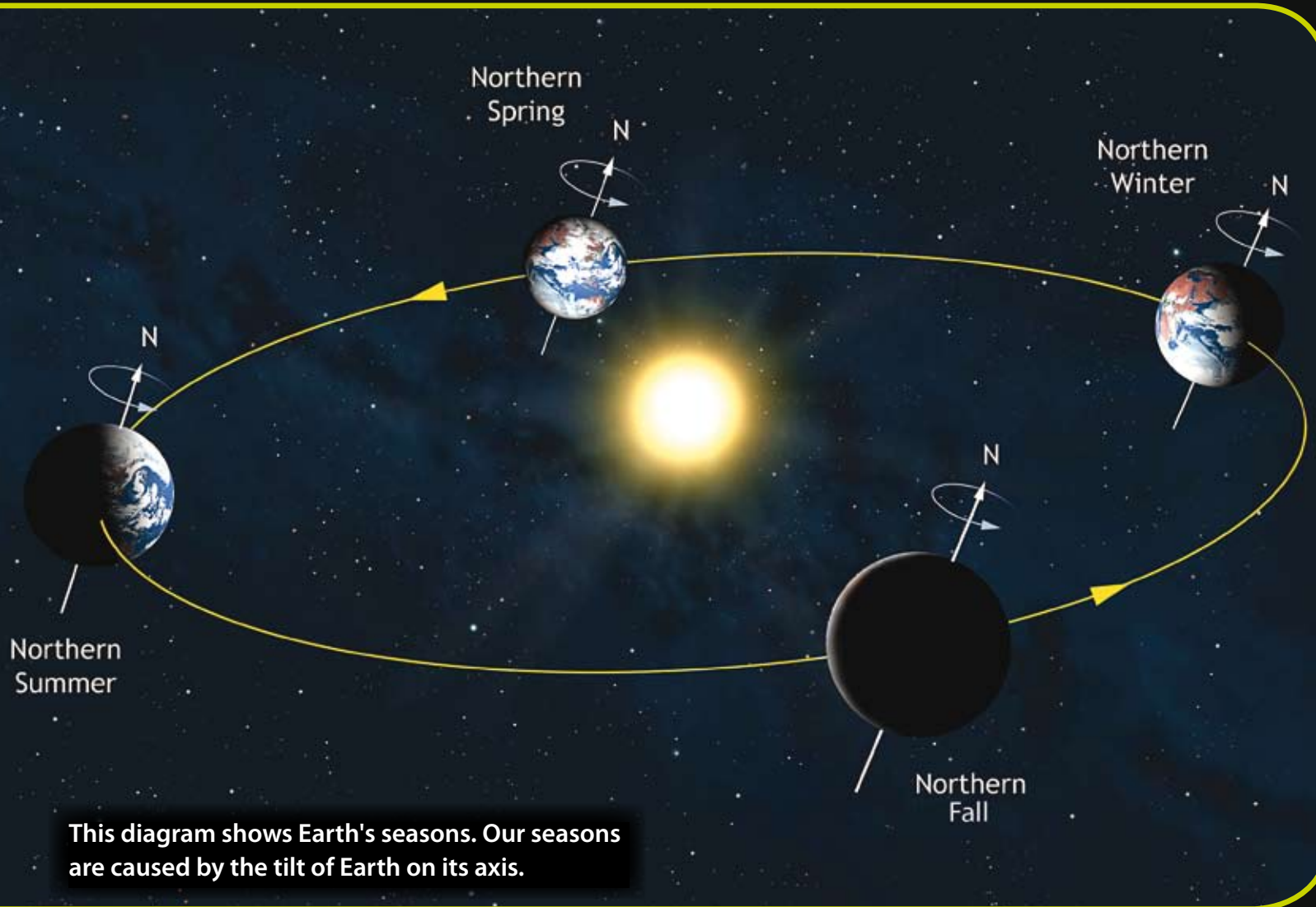


## LET'S EXPLORE MATH

The ice caps in the polar regions contain nearly 90% of all the fresh water on Earth. An equation can be used to find the percentage of Earth's fresh water that is not in the ice caps.

Solve for  $x$  to make this mathematical equation true:  $90\% + x = 100\%$

The Earth rotates on its axis. This axis is tilted. When the North Pole leans towards the sun, most of the sun's light falls on the Northern Hemisphere. So it is summer in the north and winter in the south. Six months later the South Pole leans towards the sun. The seasons are the other way around then.



## Mars

Mars is the last planet in the inner solar system. It is nearly 142 million miles (229 million km) from the sun, and about 49 million miles (79 million km) from Earth.

The surface of Mars is very rocky, and it is covered with red soil. It has the highest mountain in the solar system, Olympus Mons. The mountain is 16.8 miles (27 km) high, or 3 times as high as Mount Everest!



### How High Is Mt. Everest?

The equation  $16.8 \div 3 = x$  will help me figure it out!

*5.6 miles high*

### Inner Planet Distances from the Sun

Planet	Distance	
	Miles	Kilometers
Mercury	35,983,093	57,909,175
Venus	67,237,912	108,208,930
Earth	92,955,819	149,597,890
Mars	141,633,262	227,936,640