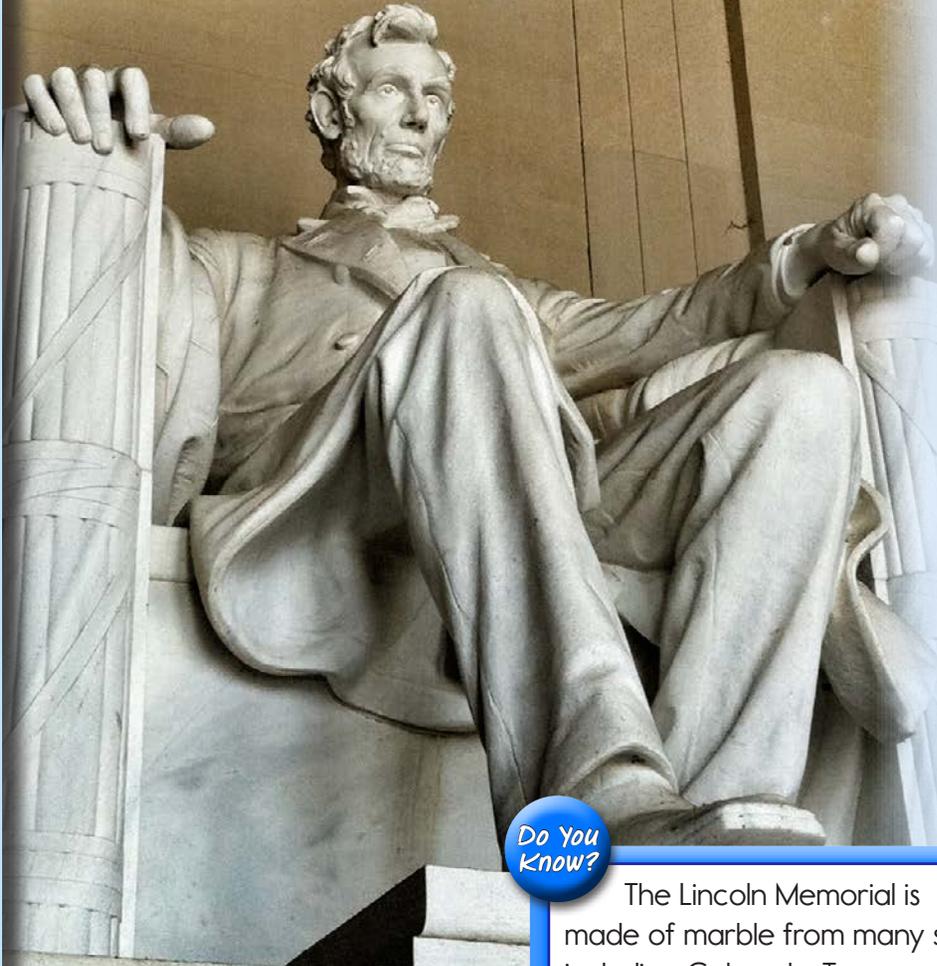


MARBLE



Do You Know?

The Lincoln Memorial is made of marble from many states, including Colorado, Tennessee, Alabama, and Georgia. These different rocks symbolize Lincoln's wish to unify the United States.

The marble statue of Abraham Lincoln at the Lincoln Memorial weighs over 108,000 kilograms (240,000 lbs.) and is almost 6 meters (19 ft.) tall!

THE MARBLE MAN

You can't meet Abraham Lincoln, the sixteenth president of the United States. But you can do the next best thing. Visit the Lincoln Memorial in Washington, D.C. You'll have to hike up ninety-eight marble steps to see the marble statue of President Lincoln!

Sculptors carved the statue in 1920. They used twenty-eight blocks of beautiful, solid marble rock. But this rock wasn't always marble.

Marble is a *metamorphic* rock. It forms in nature when an older rock called *limestone* is buried deep below Earth's surface. Gradually, heat and pressure change the limestone, and the rock becomes marble.

White marble is made mostly of just one mineral—calcite. Other marble has different minerals in it. These minerals make the marble different colors, including gray, green, or even pink. Minerals can also create colored streaks in the rock.



The Lincoln Memorial is in Washington, D.C. (shown with a green star).



GOODBYE, MARBLE!

Architects and sculptors love to use marble because it is beautiful and strong. But it does have one weakness . . . rain!

Most rain does not harm marble. But *acid rain* is different. It forms when power plants and cars release gases into the air. These gases mix with water in the atmosphere to make acid rain. Then the acid rain falls to the ground.

Acid rain can kill plants and animals. But it's also harmful to nonliving things, such as marble. The acid rain dissolves calcite, the main mineral in marble. Smooth marble stones become rough. Over time, acid rain can cause statues and buildings made of marble to crumble.

Math Moment

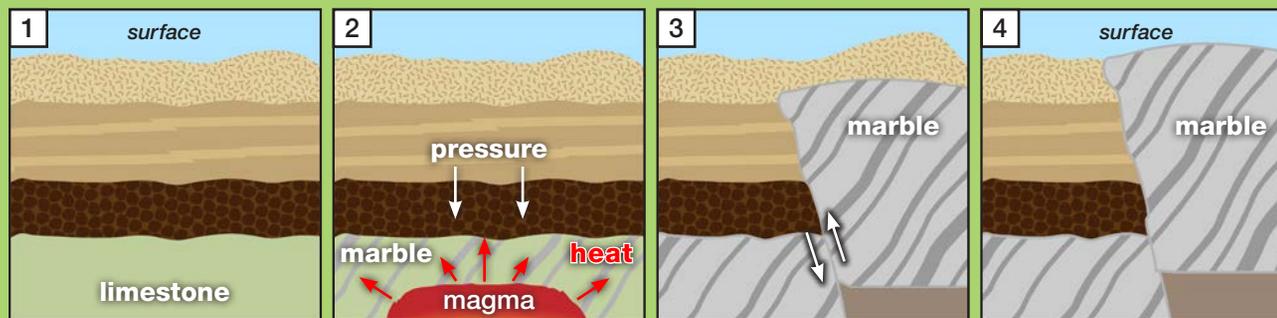
Scientists estimate that acid rain is removing a layer of marble about 1 millimeter thick every 60 years from the Lincoln Memorial. How many millimeters of marble will acid rain remove over the next 300 years?

Do You Know?

In the 1600s, companies started making toy marbles from marble rock, so people called them "marbles." Today, most marbles are made of glass.



FROM LIMESTONE TO MARBLE



1. Limestone is buried deep below Earth's surface.
2. Heat and pressure inside Earth change limestone into marble.
3. Forces inside Earth push the marble upward.
4. Erosion removes rocks from above the marble and exposes some of it at the surface.