


GEODES ADVENTURE!


Get ready to explore! Not All Geodes are created Equal! Let's start this wonderful, unpredictable adventure journey to find out the mystery of geodes!

KNOW WHAT'S INSIDE YOUR KIT


Geodes
4 REAL Geodes are included!




Storage Bag
Keep your finds well with this bag.




Magnifier
Use this handy tool for an up-close look at your geodes.



Safety Goggles
Always wear safety goggles when opening geodes.



Guide Book
Help you learn more about geode facts.



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Learn to Crack Open a Geode!

Always wear safety goggles when opening geodes.

There are many different ways to open a geode, but no matter how you do it, be patient. Followings are 2 easy methods for opening geodes, keep learning!

Hammer & Chisel Method:

Step1


Place the rock on a hard surface. Using a hammer and chisel, score a straight line all the way around the geode. Don't strike too hard, as you may crush it. The line creates a weak point so you can crack the geode in half.

Step2

Continue chiseling on the line until a crack begins to appear. If a crack does not appear, strike slightly harder until it does.

Step3

Follow the crack around the geode with the chisel, alternating sides so that the rock casing cracks evenly. Once you have a crack all the way around, gradually expand it with the chisel until the geode falls open or can be opened by hand.



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Sock & Hammer Method:


Since younger children often have trouble tapping lightly, this is a good method to use to keep pieces of rock from flying and potentially hitting someone.

Place the geode in a sock and hit it very lightly with a small sledge hammer or a rock hammer, strike the top center of the geode. A couple of strikes might be required to fully crack open this rock. Because you are cushioning the geode, your chances of two neat halves are not as great as with the hammer/chisel method, but it is still possible.

What Are Geodes?

Geodes are spheroid-shaped, aped, hollow rocks that have an inner lining of small crystals projecting inward. The word "geode" is derived from Latin meaning "earthlike," a reference to their rounded shape.

A geode is a round rock which contains a hollow cavity lined with crystals. Rocks which are completely filled with small compact crystal formations such as agate, jasper or chalcedony are called nodules. The only difference between a geode and a nodule is that a geode has a hollow cavity, and a nodule is solid.




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How Are Geodes Formed?

Geodes are natural phenomena formed out of millions of years of geological evolution. There are 2 main theories for how geodes are formed. One is made out of lava, the other is made from dolomite. Following is description of lava theory.

How Geodes Are Formed From Lava

Some geodes are formed out of molten lava rocks. After the molten rocks cool, they create gasses that, when dissolved, turn into bubbles. These bubbles turn into cavities once the rocks harden. The early stages of these cavities are called "thunder eggs".



According to experts, the minerals that form into crystals may have flowed into these cavities in two ways. Either the minerals could have come from the hot water flowing through the cracks in the lava rocks as they cooled, or they could have been deposited much later as mineral groundwater. However the minerals such as quartz are introduced into the thunder egg through a flow of water, thus creating the opportunity for crystals.


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Types of Geodes

Fluorescent Geodes
Some geodes will glow- or "fluoresce"- under ultra-violet light. This is especially true of geodes with crystals made of fluorite and calcite.



Agate
Agate is a variety of quartz made up of tiny micro-crystals. It typically has a very fine grain and bright colors, often featuring stripes of different hues.



Amethyst
Amethyst is a member of the quartz family. It can range in color from light pink to deep purple, sometimes with red or blue secondary hues. Amethyst geodes are among the most highly prized specimens.




Calcite
Calcite is a common mineral found in geodes. Calcite crystal have three sides and range in

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color from clear through shades of red and orange. Magnesium in calcite creates a pink dolomite layer.

Quartz
Most geode crystals are quartz. Magnesium in quartz creates amethyst geodes. Heat can change the color of the geode. If an amethyst geode is exposed to a lot of heat it becomes a soft yellow, or citrine.



Where Can You Find Geodes?

Geodes are found throughout the world, but the most concentrated areas are located in the deserts. Volcanic ash beds, or regions containing limestone, are common geode locations.

In the United States they can be found in California, Arizona, Utah, Nevada, Illinois, Missouri, Kentucky, and Iowa. In fact, the geode is Iowa's state rock.



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