

GMSVP sells a variety of different geodes.

One of the club's favorite is Las Choyas. These geodes are mined 100 ft below the Earth's surface. Las Choyas can be hollow, semi-hollow, or solid. Inside you could find quartz crystals in clear, white, blue, or amethyst. Solids are usually agates or crystals that have grown to totally fill the cavity. Las Choyas geodes were formed in volcanic ash beds, when cavities within the beds were permeated by hot silica rich groundwater. As the silica rich groundwater cooled, it was concentrated in the cavities where the geodes were formed. Smaller cavities tended to produce solid chalcedony geodes, while the larger cavities had more room and allowed for crystals to form in the centers.

Another variety is the Indiana geodes. These can be dug out or just picked up off the ground. These tend to be more solid and made up mainly of chalcedony and quartz. Indiana geodes are believed to be former fossils or gypsum nodules formed in ancient sea beds that were slowly replaced by quartz. They sometimes have small cavities of quartz crystals.

Moroccan geodes from Africa have fine clear-to-white quartz crystals. These geodes probably started as calcite concretions in marine sediments that were dissolved by acidic groundwater and then replaced by quartz crystal precipitated from silica rich groundwater.

Fun Facts:

- Indiana geodes were formed 325-360 million years ago in ancient seas.¹
- Mexico geodes were formed 36.6-57.8 million years ago in ancient volcanic ash flows.¹
- Moroccan Geodes were formed 50 – 70 million years ago in ancient seas.
- Geodes are most often made up of chalcedony (kal-sid-knee), with interiors of quartz crystal,¹ but can also be made up of agate and jasper banding with calcite, dolomite and celestite crystals.²
- Geodes also differ from "nodules" in that a nodule is a mass of mineral matter that has accreted around the nodule nucleus. Both structures have the minerals contained within, deposited from groundwater or hydrothermal processes.²
- A thunder egg is a nodule-like rock, similar to a filled geode, that is formed within rhyolitic volcanic ash layers.³

References

1. GEODES Nature's Treasures by Brad L Cross & June Culp Zeitner.
2. <https://en.wikipedia.org/wiki/Geode>
3. <https://en.wikipedia.org/wiki/Thunderegg>

The Gem and Mineral Society of the Virginia Peninsula



GEODES

When you purchase a geode from the GMSVP Club, we will cut your geode for free. Once your geode is cut, you will be the first to peek inside your geode that was formed millions of years ago. Each geode is unique and amazing!

Proceeds from the sale of geodes go toward the GMSVP Club expenses!

Gem & Mineral Society of the Virginia Peninsula (GMSVP)

www.gmsvp.org

