

# Stalagmite and Geode Contest



Do you have what it takes to grow the most awesome stalagmite or geode in San Bernardino County? Put your skills to the test! To enter, start following us on Instagram or Facebook. The contest begins on October 8th—and a winner will be chosen on October 15th. Geodes and stalagmites take some time to grow, so get started on yours soon! Science happens through experimentation, so see what happens when you add your own elements to these instructions.

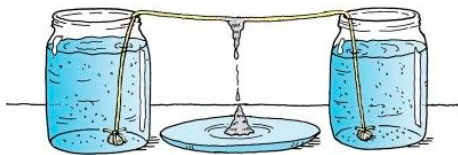
## What is a Stalagmite?

Stalagmites are a rock formation that grow from minerals deposited from dripping water. Stalagmites grow up from a cave floor; stalactites hang down from the cave ceiling. You can find stalagmites and stalactites in our exhibit, Sculpted by Time.

### Materials

- 2 jars/bowls/cups (must be same size)
- String or paper towels
- Epsom Salts
- 2 paperclips/washers (something small and heavy)
- Spoon
- Large bowl/pot
- Cookie tray/large plate

Fill the 2 jars with water and pour them into the larger bowl. Add epsom salt to this water, stirring, until no more will dissolve. Hot water will absorb more salt, but don't let it come to a boil. Return the epsom salt water to the original 2 jars. Cut a piece of string long enough to reach between the two glasses with the ends completely submerged. Attach paperclips to the ends of the string so they stay submerged. Place the full jars on a cookie tray and insert the ends of the string into the 2 jars with a slight dip in the string as between them. Now watch as your stalagmite grows! With each drip your stalagmite is forming.



## What Is a Geode?

Geodes look like ordinary rocks on the outside, but contain beautiful crystals on the inside. Geodes form when mineral-rich water enters a rock cavity and deposits crystals. Over time (sometimes millions of years) these crystals grow and line the sides of the cavity. Sometimes the empty space completely fills up with a mineral like agate—these special geodes are called thundereggs.

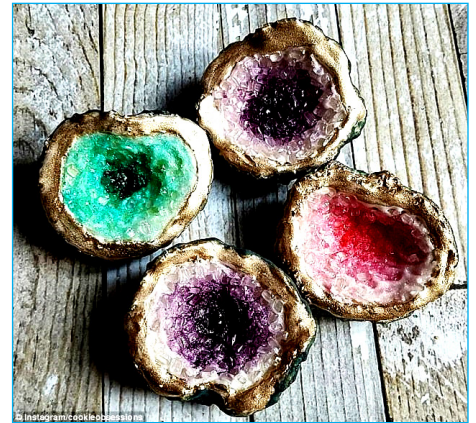
### Materials

- 2 cup of water
- 4 cups of sugar
- Food coloring (optional)
- Sauce pan
- Glass jar
- Skewers/threads/pipe cleaners

Clean and dry your glass jar. Dip your skewer in water and coat it with a layer of sugar—allow to dry.

Bring 2 cup of water to a boil in your sauce pan, and gradually add the sugar, stirring constantly to dissolve. Add 3 drops of food coloring. Let the sugar mixture to cool for about 10 minutes, then pour it into your glass jar.

Submerge your skewer into the sugar mixture until it hangs about 1 inch from the base of the jar (you can use a pencil or clothes pins to help achieve this). Crystals should start to grow in 2 to 4 hours. Let them grow as long as you want, but be sure they don't grow to touch the sides of the jar.



### Materials

- 2 "Big Hunks" candy bars
- Aluminum foil
- Microwave
- Sauce pan
- 1 cup of water
- 3 cups of sugar
- Food coloring (optional)

Heat the candy bars in the microwave so they are moldable. Use aluminum foil to help you shape the candy into a bowl shape. Let it sit and harden. This is your geode shell.

Bring 1 cup of water to a boil and add the sugar gradually, stirring constantly to dissolve. Add 3 drops of food coloring. Let the sugar mixture cool for about 10 minutes and pour inside your geode's exterior. Coat all sides of the geode and fill about half way. Your crystals will grow overnight. In the morning turn your geode over to allow for it to completely dry for about an hour. Trim any unwanted crystals or geode shell.

Photograph your stalagmite and your geodes and post to social media:  
Instagram [#sbcountymuseum](#) • Facebook [@SBCMuseum](#) and [@VVMuseum](#)  
Twitter [@SBCountyMuseum](#)

Contest winners will be announced on Facebook and Instagram on October 15, 2017, and can claim their prize at the San Bernardino County Museum.