

Make Your Own Eggshell Geodes

Purpose

The purpose of this activity is to introduce you to the fascinating world of crystals and to show you how you can make cool eggshell geodes like the ones below.



Skills and Knowledge

In completing this activity, you will learn:

1. What a crystal is
2. What a geode is
3. How to grow your own crystals
4. How to make eggshell geodes

Tasks

1. A crystal is a mineral whose atoms (that's the super, super, super teeny tiny stuff *everything* is made of) are arranged in a regular pattern. Salt is a crystal and so are many of the most beautiful and cool-looking rocks. Learn more by watching this video: <https://youtu.be/o8f1RAEHL-M>

2. A geode is cool because it looks like a regular rock on the outside but has crystals on the inside. These are pictures of real geodes.



Do you see how the one on the left is all sparkly and kind of hollow? That's the inside of the geode. Do you see how the one on the right looks, well, like a regular rock? That's the outside. You can learn how nature makes geodes by watching this short video: <https://youtu.be/msBBEuyIIQQ>

3. Now that you know all about crystals and geodes, make your own! Here is the stuff you will need:
- 3 eggs
 - ½ Cup alum powder (available in the baking section of the grocery store)
 - White glue
 - Food coloring
 - 1 and 1/3 Cup hot, not quite boiling water
4. Hollow out your eggs by tapping the narrow end gently on your counter until you have a little hole. Shake the inside of the eggs into a bowl and save for another use. Now, gently use your fingers to break away one half of the egg. (You will probably only end up with one useable half per egg.) Wash your eggshells and leave them out to dry. Wash your hands too!
5. When the eggshells are dry, use a small paintbrush to coat the inside of the shells with white glue. Let them dry overnight.
6. The next day, have your grown up pour the very hot, not quite boiling water into a small/medium bowl.
7. Add 30-40 drops of food coloring to the hot water.
8. Add the alum powder. Mix it very well with a long spoon. Don't stop mixing until the powder has dissolved.
9. Let the mixture cool for 30 minutes.
10. Gently place the half eggshells in the mixture. Leave eggshells alone for 15 hours or more. The longer they rest, the bigger the crystals will get!
11. Gently remove your new egg geode. If you want even more crystals, drain the liquid from the bowl and scoop some of the remaining crystals into your geode.



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For more geology crafts and activities visit her website, MargaretFinnegan.com