

Create your own

EGGSHELL GEODES



Get a glimpse of how crystals grow inside a geode by conducting a STEM experiment using everyday ingredients from your own kitchen.

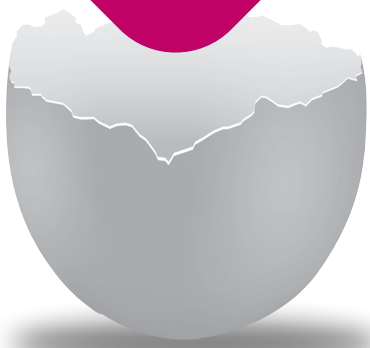
YOU'LL NEED:

- 3 eggs
- Red, blue, and green food coloring
- Table salt
- Regular sugar
- Baking soda
- Hot water
- Cupcake pan

1 Have an adult help you crack off the top of each egg, clean out the bottoms, and stand the shells up in the cupcake pan. Use a tissue to prop them up if needed.

2 Create the three mixtures below to fill into each shell (see diagram).

1/4 cup water
1/3 cup sugar
1 drop red
food coloring



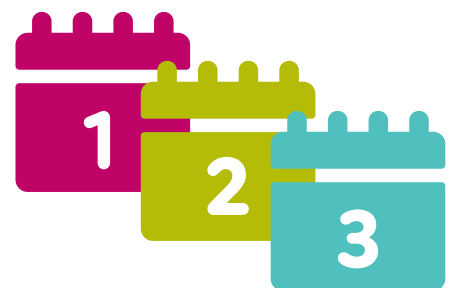
1/4 cup water
1/3 cup baking soda
1 drop green food
coloring



1/4 cup water
1/3 cup salt
1 drop blue
food coloring

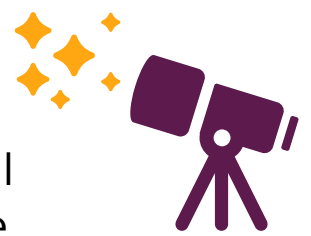


3 Compare the shells over the next five days to see which mixture grew the most.



SO WHAT HAPPENED?

Real geodes form when dissolved minerals tackle into hollow spaces and harden into an outer shell. The mineral crystals continue to grow towards the center of the geode. In this experiment, the sugar, salt and baking soda act as the dissolved mineral that grows inside the eggshell.



EXPAND YOUR EXPERIMENT

Try other experiments to see how they compare with your findings. How about brown sugar or Epsom salt? See what else you can discover!



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