

Geology Rocks! – The Chocolate Rock Cycle

With the Geological Society!



The Chocolate Rock Cycle

This activity is an introduction to the rock cycle using chocolate. Chocolate has the ability to be ground into small particles (weathered), heated, cooled and compressed just like rocks. Unlike rocks, this can all be done safely and at reasonable temperatures, using the chocolate to create sedimentary, metamorphic and igneous chocolate and, at the end of it all, can make a tasty treat.

Materials

- Blocks of dark and white chocolate – you can use candy melts, or any kind of chips (white, butterscotch, etc). You'll want different colors of candy that will melt at the same temperature.
- Source of hot water
- Aluminum foil (recommended) and/or aluminum foil cake cups
- Container to hold hot water
- Simple scraping device, e.g., plastic knife, cheese grater or vegetable peeler



To make Sedimentary Chocolate

1. Scrape some small sized shavings from your chocolate blocks, using at least two colors.
2. Gather these scrapings onto a piece of aluminum foil, one color layered on top of another color, and press down on them. You could fold the aluminum foil and then press on the chocolate shavings (children may want to stand on the foil packages).
3. The coherent bunch of chocolate scrapings in the foil is now equivalent to **sedimentary** chocolate.



To make Metamorphic Chocolate

1. Place a small pile of your sedimentary chocolate and maybe some of your original shavings that were not used and one or two small chunks from your original block into aluminum foil. Fold the foil to make a sort of boat.
2. Float this on hot water.
3. Watch as the heat from the water transfers to the foil and to the chocolate, which should start to melt.
4. Remove the foil when the chocolate is soft to the touch (use the plastic knife or other tool to test, not fingers)
5. Let the chocolate cool.
6. The partially melted and cooled chocolate is now the equivalent of **metamorphic** chocolate.



To make Igneous Chocolate

1. Place a small pile of sedimentary and metamorphic chocolate and some chunks from original block into aluminum foil or cake cup.
2. Float this on very hot water
3. Watch as the heat transfers from the water to the foil and then the chocolate and it starts to melt
4. The chocolate should be allowed to melt until a smooth liquid forms
5. Carefully remove the molten chocolate and let it cool. Your totally melted and cooled chocolate is now equivalent to **igneous** chocolate



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<https://www.funkidslive.com/learn/geology-rocks/>



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