

Ohio State University Extension Lorain County 4-H School Enrichment Outreach

Starburst Rock Cycle

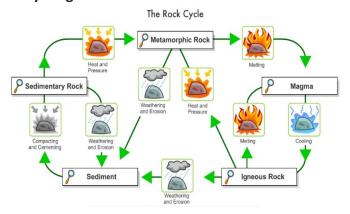
Inspired by Geology: Can You Dig It? An Ohio 4-H Project Book

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The rock cycle, you've heard of that. But Starburst? Check it out!

This is a hands-on STEM activity demonstrating three different stages of the rock cycle – and you use candy to do it. Science just got a whole lot more delicious!

The <u>rock cycle</u> is how rocks and <u>sediment</u>, broken up pieces of rock and earth, move from the earth's surface deep into the earth; continuously transforming from one form into another, over a **very long time**.



The three types of rock on this diagram can be found all around us. It makes rock collecting an easy hobby to start! You may find lots of fossils too. Fossils are the preserved remains or traces of plants and animals that lived long ago.



As you follow the arrows on the rock cycle diagram, you'll notice heat, pressure, weathering, erosion, cementing and compacting. With these forces at work, different types of rocks are created.

To make the candy "rocks":

- A microwave acts as heat from deep in the earth.
- Your hands apply pressure to cements and compact.
- The sediment is where the candy comes in!

Materials needed:

Adult helper <u>and</u> Microwave oven

5 StarburstTM candies <u>and</u> 2 parchment paper* squares

(*you can use a cupcake liner or wax paper, but the candy may stick to the paper!)

Procedure:

- 1) Take 2 unwrapped pieces and squeeze together (in your hands) to form the sedimentary rock.
 - Sedimentary rock is layered through compacting and cementing.
- 2) Place 2 pieces unwrapped pieces on parchment. Warm in microwave for ~8 seconds. Now, **gently squeeze** together to form metamorphic rock.
 - Metamorphic rock is sedimentary rock that gets transformed by heat and pressure.
- Place last unwrapped piece on parchment.
 Microwave until completely melted/bubbly ~15 seconds. Now it's "magma".

Let it cool before you touch it. It is VERY, VERY HOT.

❖ Magma forms into igneous rock as it cools.

Now, examine your results. How are they alike?

How are they different?

Content adapted from Ohio 4-H project book and https://www.dkfindout.com/us/earth/rocks-and-minerals/g



