### Procedure

- Using the plastic knife, scrape some shavings from your chocolate. Place your shavings on a piece of aluminum foil and fold the foil over half the shavings. Press down on the shavings with a lot of pressure! Open the aluminum foil and observe - all the shavings have joined together. You’ve made a chocolate sedimentary rock.
- Add some extra chocolate shavings and a couple chunks of chocolate on top of your chocolate rock and cover it with aluminum foil. Roll up the sides to make your aluminum packet waterproof. Fill a container with hot water and place your aluminum packet on top of the water. When the packet is soft to the touch, remove it from water and set it aside to cool. Open the aluminum foil packet and observe the chocolate. The chocolate has softened then cooled. You’ve now made a chocolate metamorphic rock.
- Add a few chunks of chocolate to the aluminum foil and close the packet again. Ask an adult to help you make some very hot water and to carefully place the packet on top of the water. Allow the chocolate to melt completely. Carefully remove the packet with a utensil (the packet may be too hot to touch) and let it cool. Your completely melted and cooled chocolate rock is now an igneous rock.

### Materials

- Chocolate bars or chips
- Aluminum foil
- Hot water and a container to hold it
- A plastic knife or another simple scraping device

### Results

You have recreated the phases of the rock cycle and created three different types of “rocks.”

### Why?

There are 3 main types of rocks; sedimentary, metamorphic, and igneous. Rocks on the Earth’s surface are weathered and broken up into smaller pieces over time. These pieces are picked up and deposited in a new place by wind or water and become compacted to form a new rock. This type of rock is called a sedimentary rock. If rocks become buried deep in the Earth’s crust, they experience a huge amount of heat and pressure and transform into metamorphic rocks. Rocks that are exposed to extreme heat melt to become molten rock then cool into igneous rock. When the rock becomes exposed to the surface again, the cycle repeats.

To learn more about Earth science, check out the Restless Earth exhibit at the Pink Palace Museum.