

## The Rock Cycle

## GOD IS A GREAT RECYCLER. When

God said in Genesis, "Let dry ground appear," God created solid, recyclable material. Do you know what I'm talking about?

Rocks! Rocks are being recycled all the time—just really, really slowly.

It doesn't matter where you start the recycling process, so let's start with a volcanic explosion! When the magma (underground) or lava (aboveground) cools, it creates what we call igneous rocks. Granite is a good example. It usually has three colors: pink, black, and white. The white is quartz, the black is mica, and the pink is feldspar.

The volcano explodes and cools, and time passes.

This igneous rock sits on the earth's surface for a long time. It heats up, it cools down, it gets wet, it gets blasted by the wind, waves crash against it, ice forms on it, and time passes.

Pieces of granite get smaller and smaller and smaller until eventually we're left with sand. If you look closely at a piece of sand, it might look like a miniature granite stone. This granite sand gets washed away by rain or a creek to a river to the sea, where it settles at the bottom of the ocean.

And time passes.

Layers of the granite sand start piling up—layer upon layer upon layer. A lot of pressure builds up on the bottom layer.

And time passes.

Finally, the bottom layer of granite sand is under so much pressure that it forms a rock. This rock is called sandstone. It is a sedimentary rock. You can often identify sedimentary rock by observing its layers.

But wait, there's more! This layer of rock is moving—ever so

slowly—deeper into the earth. It can be pushed down by other layers, or it can get heated up by magma. It slowly, slowly, slowly moves to an area with more pressure and more heat.

## And time passes.

The sandstone, which was sand, which was granite, which was lava or magma, has moved to a place with so much heat and pressure that it changes again! This time it becomes a metamorphic rock called quartzite. The bits of granite combine to form one rock with no layers.

And time passes.

The quartzite continues to be pushed deeper and deeper and deeper into the earth's crust. It becomes hotter and hotter and hotter until it melts, becoming magma once again.

And time passes.

The magma moves slowly under the earth's crust until it finds an opening. It rushes out the opening, and the magma that was quartzite that was sandstone that was sand that was granite that was magma becomes lava again. It all starts and ends with an explosion!

God creates rocks to move through the rock cycle. From igneous to sedimentary to metamorphic and back again it is an amazing process! God truly is an amazing recycler!

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