

ROCK CYCLE MOVIE TRANSCRIPT

Text reads: The Mysteries of Life with Tim and Moby

A boy, Tim, and a robot, Moby, are exploring a rocky area. Moby holds up a green rock to show Tim.

TIM: Wow. That looks like an emerald.

MOBY: Beep.

TIM: It is not Kryptonite.

Moby opens his chest plate and places the rock inside for safekeeping. Tim reads from a typed letter.

TIM: Dear Tim and Moby, I watched your movie about the water cycle. I heard there's a rock cycle, too. From, Dana.

TIM: Right-O, Dana. There are three types of rocks: igneous, sedimentary, and metamorphic. But they don't always stay that way. One type of rock can change into another under the right conditions. This here is an igneous rock.

Tim points to a large, black rock.

TIM: I'll bet there's a volcano around here somewhere.

They see a tall volcano with lava bubbling at its top.

TIM: Yep, there it is.

Lava flows in a stream in front of Moby and Tim.

TIM: Molten rock is called magma, or lava, when it reaches the surface. Igneous rocks form when molten rock cools and hardens, either deep underground or on the surface.

The stream in front of Tim and Moby cools and hardens.

TIM: Granite, obsidian, basalt, and pumice are all types of igneous rocks.

Images show the igneous rocks Tim mentions.

TIM: Uh, sedimentary rocks form on the earth's surface, usually from erosion.

There is soft thunder, and it begins to rain on Moby and Tim. A rapid stream of water flows in front of them.

TIM: Whoa. During storms, wind and rain can break apart the landscape and wash away the pieces. These particles collect at the bottom of bodies of water, forming layers. Over time, these sediments can harden and bond together to form sedimentary rocks.

An animation illustrates the process that Tim is describing.

TIM: Limestone, sandstone, shale, and clay are all sedimentary rocks.

Images show various sedimentary rocks.

TIM: Coal, which consists of the compressed remains of living things, is also considered sedimentary.

An image shows a lump of coal.

Moby picks up a rock from atop a large boulder. A cloud of steam blasts him in the face.

MOBY: Beep.

TIM: The inside of the earth is hot. Sometimes rocks get so hot that they bake. Heat, along with pressure, can change them, creating metamorphic rocks.

An animation shows a cross-section of an active but non-erupting volcano. Downward arrows illustrate how baked rocks turn into metamorphic rocks.

TIM: Lots of times the earth's plate movement will create metamorphic rocks. Plates produce heat when they move around and collide.

An animation shows Earth's tectonic plates moving the way Tim describes.

TIM: You might find a mountain of metamorphic crystal and rocks like marble, quartzite, schist, and slate, pushed up by plate conditions.

Images show the metamorphic rocks Tim mentions.

MOBY: Beep.

TIM: Well like I said, all these rocks don't stay that way forever. The rock cycle is a cycle after all. Igneous and metamorphic rocks can be eroded to form sedimentary rock. Sedimentary and igneous rocks subjected to heat and pressure become metamorphic. And metamorphic and sedimentary rock can be melted down and cooled back into igneous.

The words, The Rock Cycle, appear on the screen. An animation illustrates the rock cycle as Tim describes it.

Tim and Moby stand in front of a short rock wall. Behind that wall, lava is flowing. There is soft thunder and it is raining.

TIM: OK. I, uh, I think it is time to get off this mountain.