Sedimentary Rocks (Monday)

Let’s learn some facts about Sedimentary rocks! To [geologists](http://en.wikipedia.org/wiki/Geologist), people who study [rocks](https://www.coolkidfacts.com/rocks-and-minerals/), soil, [fossils](https://www.coolkidfacts.com/fossils/), mountains and earthquakes, a rock is a natural substance that is made up of solid [crystals](https://www.coolkidfacts.com/crystal-facts-for-kids/) of different minerals that have been fused together into a solid lump.

The minerals may or may not have been formed at the same time. What matters is that natural processes that glued them all together.

Sedimentary Rocks

Sedimentary rocks are formed from broken down bits of other rocks or even from the remains of plants or animals.

The little pieces collect in low-lying areas by lakes, oceans, and [deserts](https://www.coolkidfacts.com/desert-facts-for-kids/).

They are then compressed back into rock by the weight of the materials around them and on top of them.

**What are the different types of rocks?**

There are three basic types of rocks including igneous, sedimentary, and metamorphic.

Sedimentary are the most common rocks that we see across the Earth’s surface but form only a small part of the entire crust when compared to igneous and metamorphic rocks.

**How are Sedimentary rocks formed?**

When mountains are first formed, they are tall and jagged like the Rocky Mountains of North America.

Over millions of years mountains become old mountains like the Appalachian Mountains of Canada and the United States.

When they are older, they are more rounded and quite a bit lower.

As mountains age lots of rock gets worn away by [erosion](https://www.coolkidfacts.com/erosion-facts/), which is from [rain](https://www.coolkidfacts.com/how-is-rain-formed/), [snow](https://www.coolkidfacts.com/snow-facts-for-kids/), wind and running water. The big mountains crumble one little bit at a time.

Eventually most of the broken bits of the rock end up in streams and rivers that flow down the mountains.

These little bits of rock and sand are called sediments.

When the water slows down enough, they settle in layers on the bottom of lakes or oceans they run into.

Each layer is like the page of a book. One piece of paper is not heavy.

But a stack of telephone books is very heavy and squishes anything underneath.

Over time the layers of sand and mud at the bottom of lakes and oceans turns into rocks called sedimentary rocks.

Metamorphic Rocks (Tuesday)

Rocks are made up of one or more minerals. Although different rocks can contain the same [minerals](https://www.coolkidfacts.com/rocks-and-minerals/), they are sorted into different types of rocks depending on how they were formed.

Metamorphic rocks form when existing rocks are exposed to [heat](https://www.coolkidfacts.com/heat/) and [pressure](https://www.coolkidfacts.com/pressure/) deep within the Earth’s surface. That’s a pretty neat way of understanding different types of rocks!

Examples of Metamorphic Rocks

Examples of metamorphic rocks are marble and slate. There are many more with some really weird names like anthracite, quartzite, granulite, gneiss and schist.

What Are Some Other Types of Rocks?

There are three types of rocks: igneous, sedimentary and of course metamorphic rocks.

Metamorphic rocks don’t only form from [igneous](https://www.coolkidfacts.com/igneous-rocks-for-kids/) or [sedimentary](https://www.coolkidfacts.com/sedimentary-rocks/) rocks, but they can also be formed from other metamorphic rocks. Wow, that’s weird.

How is Metamorphic Rock Formed?

This type of rock is formed under extreme pressure and heat over quite a long time.

Metamorphic rocks are called this name as they always start out as another rock. Metamorphic is a word that literally means to change from one thing to another. There you go…now you know!

When slate forms, some of the clay from the original rock is replaced by a mineral called mica.

During the stage of changing – which is called contact metamorphism – broken down pieces of rock near the Earth’s surface are changed by magma.

During [regional metamorphism](http://www.tulane.edu/~sanelson/eens212/regionalmetamorph.htm), another stage of changing, rocks buried deep down in the Earth are changed by magma chambers.

Even though the rock gets really, really hot and is under a whole heap of pressure, it doesn’t melt. Wow, that’s one strong rock.

If it did melt, that would mean that either igneous or sedimentary rocks would form.

Interesting Metamorphic Rock Facts

Did you know that most of the Earth’s [crust](https://www.coolkidfacts.com/earths-crust-facts-for-kids/) is made of metamorphic rock? Well, it’s true!

**Igneous rocks (Wednesday)**

[Igneous rocks](https://www.coolkidfacts.com/igneous-rocks-for-kids/%22%20%5Ct%20%22_blank) are created when magma cools and hardens. Magma is the same material that forms lava (that really hot stuff that explodes out of [volcanoes](https://www.coolkidfacts.com/volcano-facts-for-kids/)).

There are two types of igneous rock: extrusive (x-trew-sivv) igneous rock and intrusive (in-trew-sivv) igneous rock, and the type depends on where the rock was formed.

If the rock is formed by cooled, hardened magma on the surface of the Earth, it is called extrusive igneous rock.

Because volcanoes help form extrusive igneous rocks, they are sometimes called volcanic rocks. These rocks form very fast and usually look glassy or shiny. Some examples are basalt, obsidian, and pumice.

As you might have guessed from the name, intrusive igneous rock forms inside of the Earth, below its surface.

When magma cools and hardens beneath the surface, it is a much longer process, so intrusive igneous rocks are usually grainy and rough.

Granite and gabbro are examples of intrusive igneous rock.

Scientists have identified over 700 varieties of igneous rock. That’s a lot of rocks, and we still have two types left to learn about!