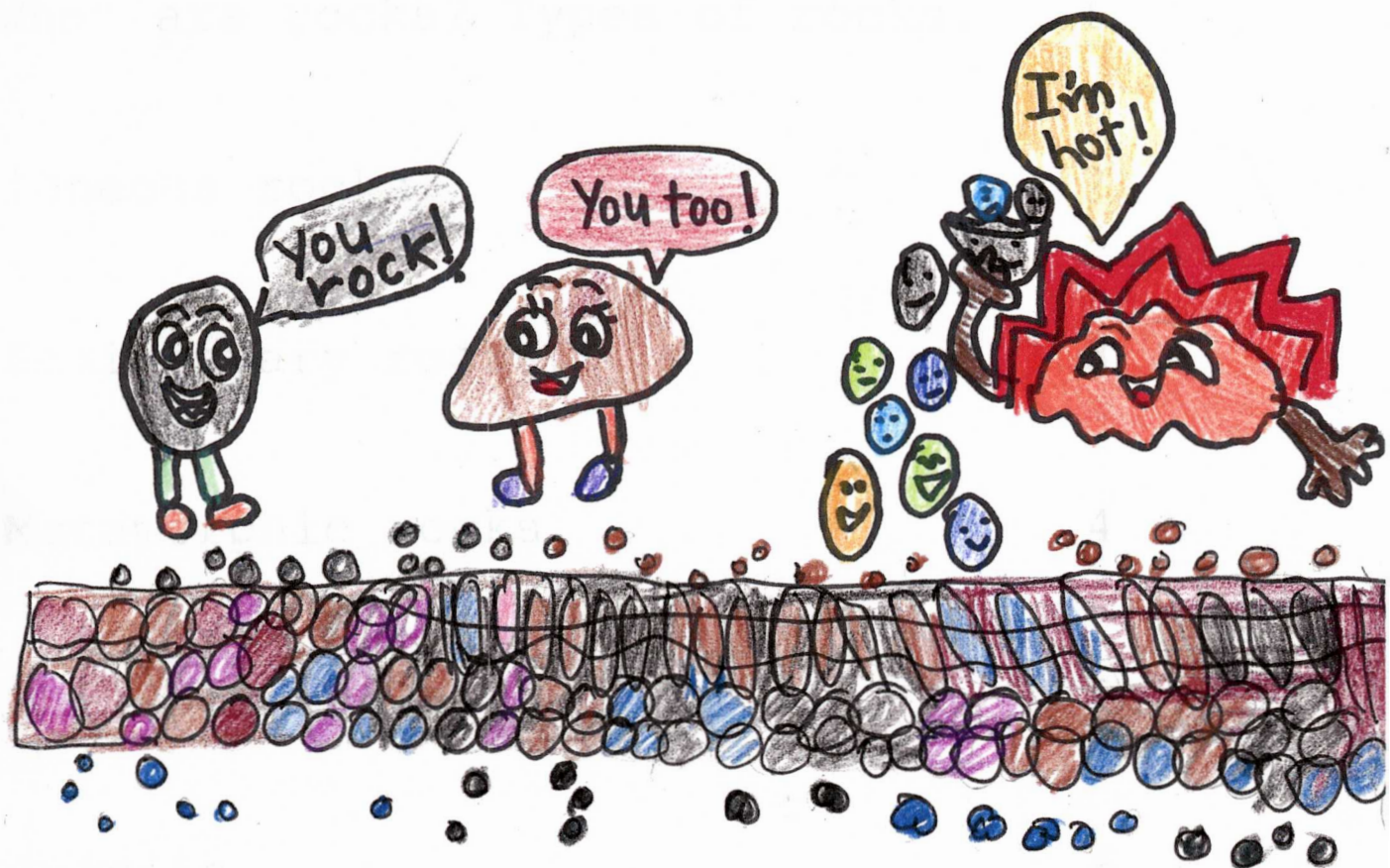


ROCKS Everywhere



A ROCK zine by:
Manya Saxena.

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What is a rock?

How do rocks travel?

Rocks are everywhere in nature. They are made up of **minerals**.

In **geology**, a rock is defined as:

- a solid mass
- naturally occurring
- made of either mineral or mineraloid matter.

Very big rocks are called boulders. Tiny rocks are pebbles. Rocks can be smooth or rough. Some are light and some are heavy.

Types of Rocks

IGNEOUS Rocks

- forms when melted rock (magma) cools and hardens.
- example- basalt, granite, pumice, obsidian

SEDIMENTARY Rocks

- made of sediments such as, sand, mud, pebbles, clay, plants and bones.
- Example- sandstone, limestone, shale

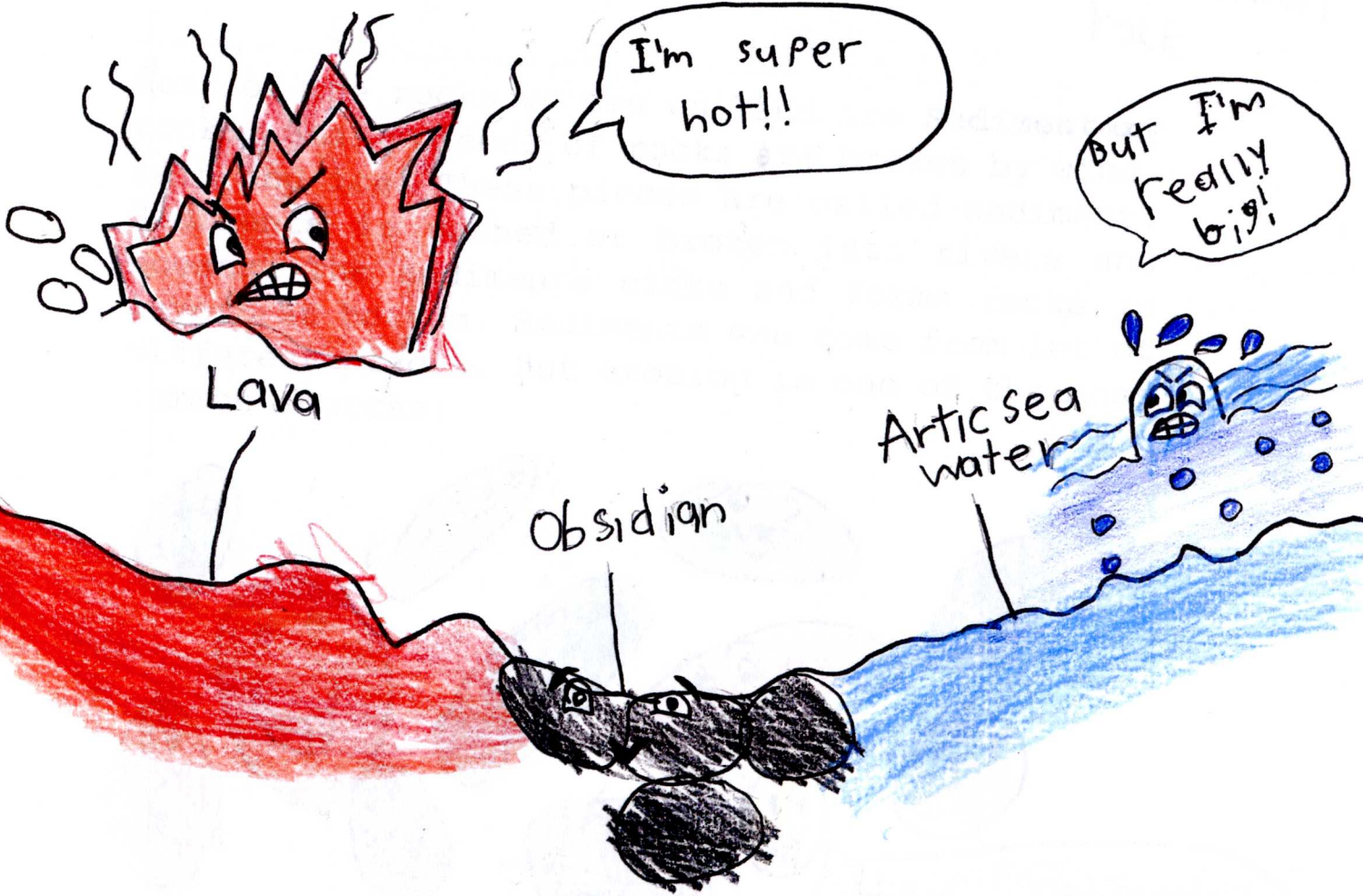
METAMORPHIC Rocks

- forms with heat and pressure.
- Example- slate, marble, quartzite.

Igneous Rocks

all about lava!

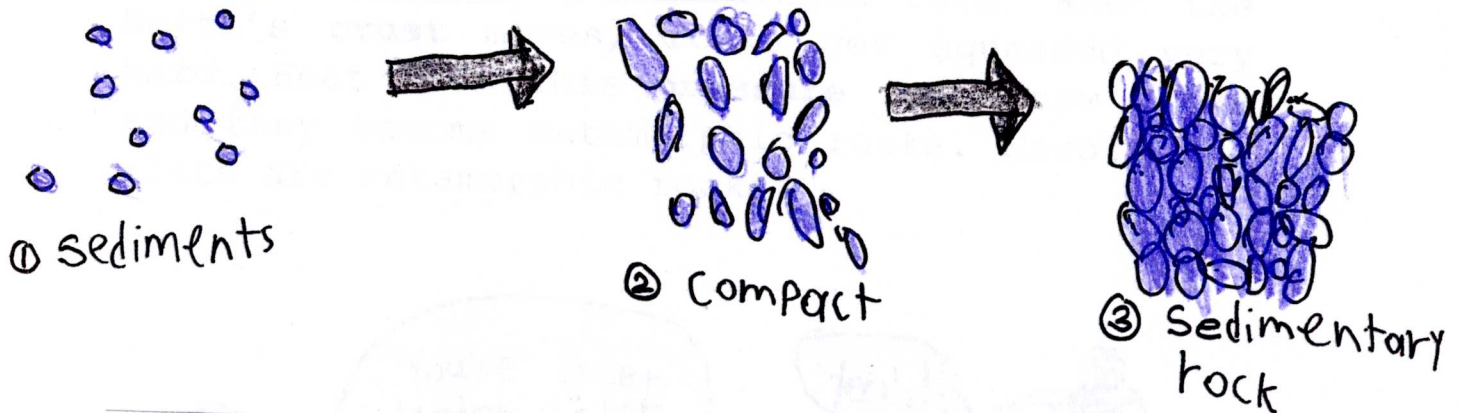
Melted rocks inside Earth is usually called **magma**, and melted rock on Earth's surface is called **lava**. When lava cools down, it solidifies back into rock. What type of rock? Well that depends on how much gas the lava contained, how much silica it has and how quickly it cools. Any type of rock that comes from lava is called an **igneous** rock.



Sedimentary Rocks

All about sediments!

HOW TO MAKE A SEDIMENTARY ROCK:



Most of the rocks we see on land are **Sedimentary** rocks. Small pieces of rocks are broken by wind, rain and ice. These pieces are called sediment. Sediments is washed or broken into rivers and oceans. The sediments sinks and forms rocks in layers at bottom. Sediments can come from lot of different places, but erosion is one of the most common sources!



Metamorphic Rocks

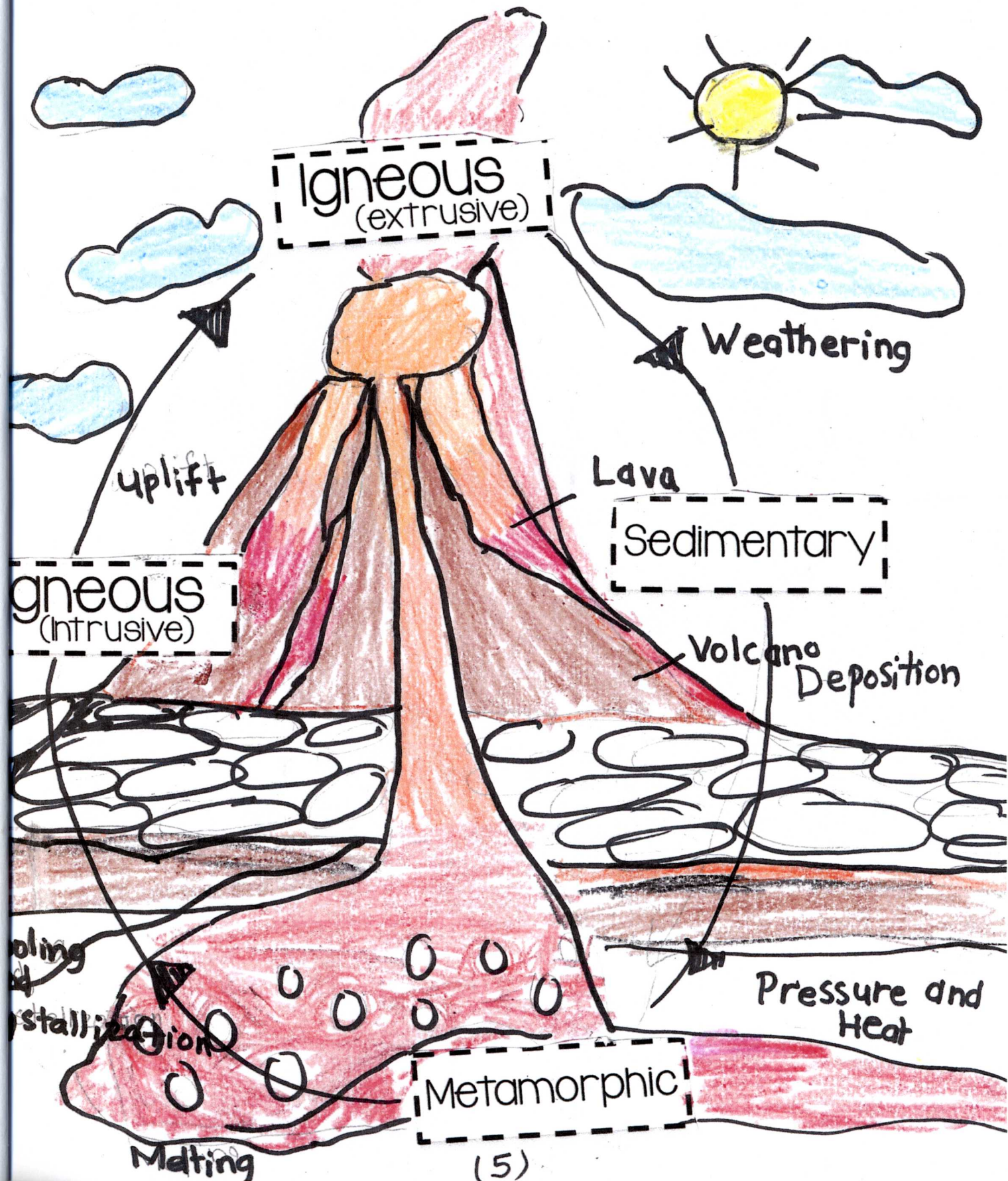
Metamorphic rocks have changed form. When the Earth's **crust** moves, rocks get squeezed very hard. Heat from this **pressure** forms new rocks and they become metamorphic rocks. Marble and slate are metamorphic rocks.



The Rock Cycle

On top of the earth, rock is pressed together. The rock erodes. Then it is pushed down deep into earth. There the rock melts and is pressed together. Then the rock is pushed back to the top of earth again.

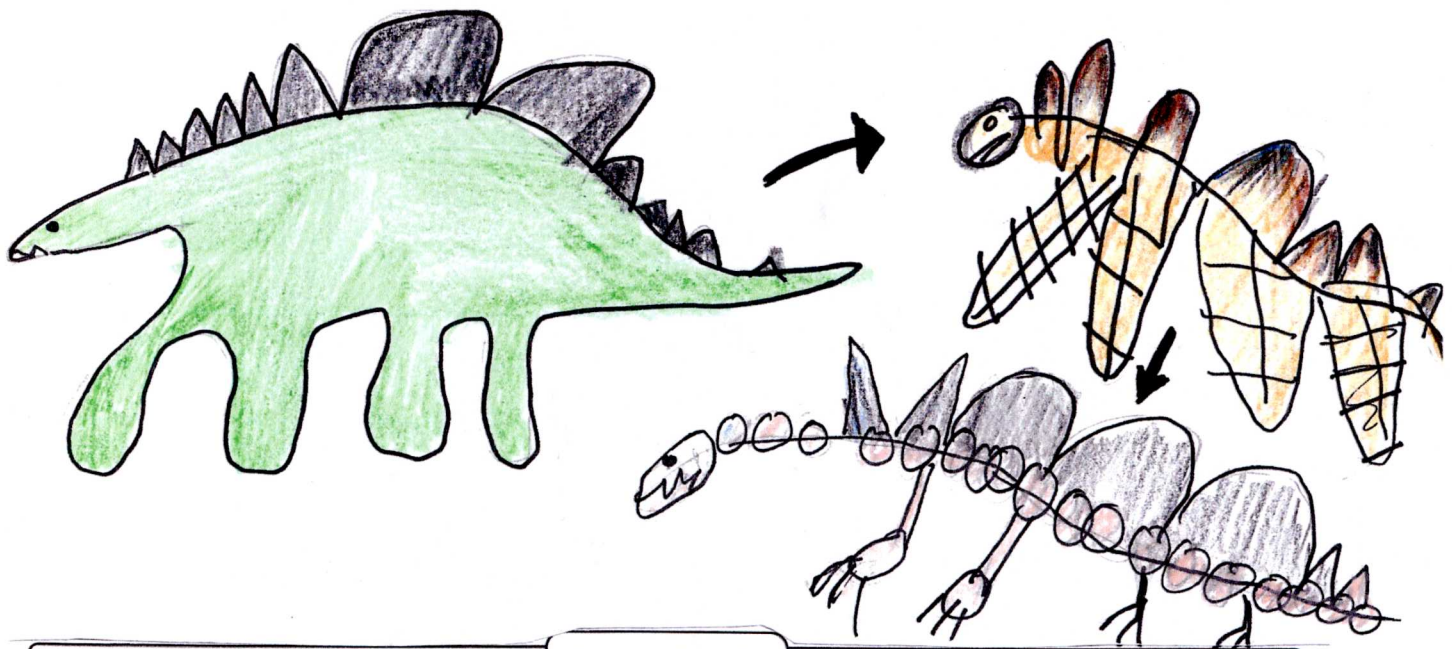
The ROCK cycle



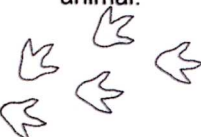



fossils

Fossils are remains of plants and animals from million of years ago. They look like rocks with design or picture in them. Fossilization is rare! Scientists estimate that less than one in a million make it into fossil record.

Fossils usually formed when a dead plant or animal lies buried in sand or mud. Over the time the sand, mud, and dead remains harden. The remains turn into rocks.



Types of fossils:

TRACE	MOLDS CASTS	PERMINERALIZED (FOSSILIZED)	ACTUAL SPECIMEN
Evidence of the organism, but NOT the actual plant/animal.	The animal/plant has dissolved away, but the impression remained.	Tissue has been replaced with minerals! Most dinosaur bones and petrified wood fossils have been permineralized.	The rarest type. The actual animal or plant is preserved by being frozen or encased in amber.
 footprints	 seashell mold	 Bone, T-rex claw, petrified wood	 insect in amber

Rocks and Minerals

Y Q U M V Z H Y V U I U D A P
 L S M E T A M O R P H I C C L
 R F E T H M C S F P T O T T C
 G M R D X M I N E R A L S C L
 Z E Y F I T S R O Y F R G R A
 Y Z F D Q M Z W D Q O D E Y V
 R O C K S G E R D Y S X O S A
 E C D Q Z P I N V Z S G L T X
 C C I Z O L J W T L I L O A I
 M D N G M S E I R A L Q G L I
 A S H J N D C X G K R G I B L
 G F N O S E Z H D B O Y S U R
 M G V U A U O T B A F E T U G
 A J T I R H T U K C B B E L D
 P C U Z P E U V S R K T Z S Y

Sedimentary

Igneous

Magma

Metamorphic

Crystal

Lava

Geologist

Rocks

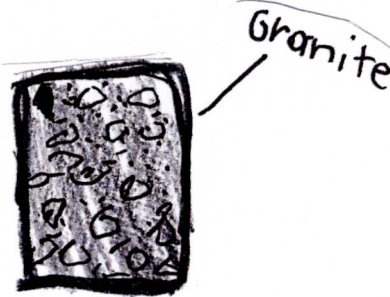
Minerals

Fossil

DID YOU KNOW ?

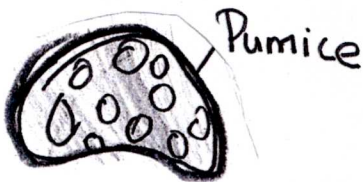
Q What's a mice's favorite rock?

A Pumice!



Obsidian was used to make knives and tools and can be sharper than a steel razor.

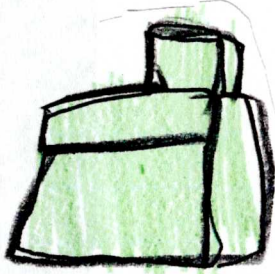
Granite is very popular rock in construction.



Pumice contains little pockets of air that makes it float on water.

More than 90% of all volcanic rock on Earth is Basalt!

Limestone



Sandstone



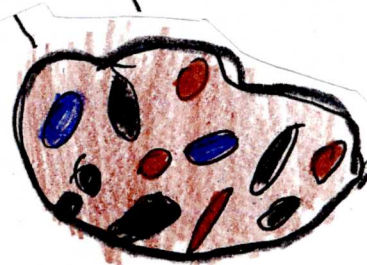
Limestone is sometimes used to make buildings and statues. Caves are also formed of limestone.

Sandstone is made from sand. Sometimes they have orange and red beautiful stripes.

Shale



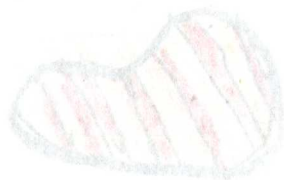
Conglomerate



Shale is most common sedimentary rock, sometimes it breaks into thin layers and between layers fossils can be found!

Conglomerate are formed in ancient riverbeds. They look like bunch of pebbles together.

Limestone



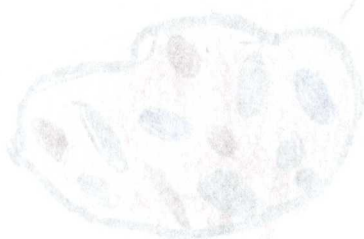
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