

6. Name three kinds of sedimentary rocks.

7. What three things can change sedimentary rocks?

8. What will each of these rocks change into?

a. Sandstone _____

b. Shale _____

c. Limestone _____

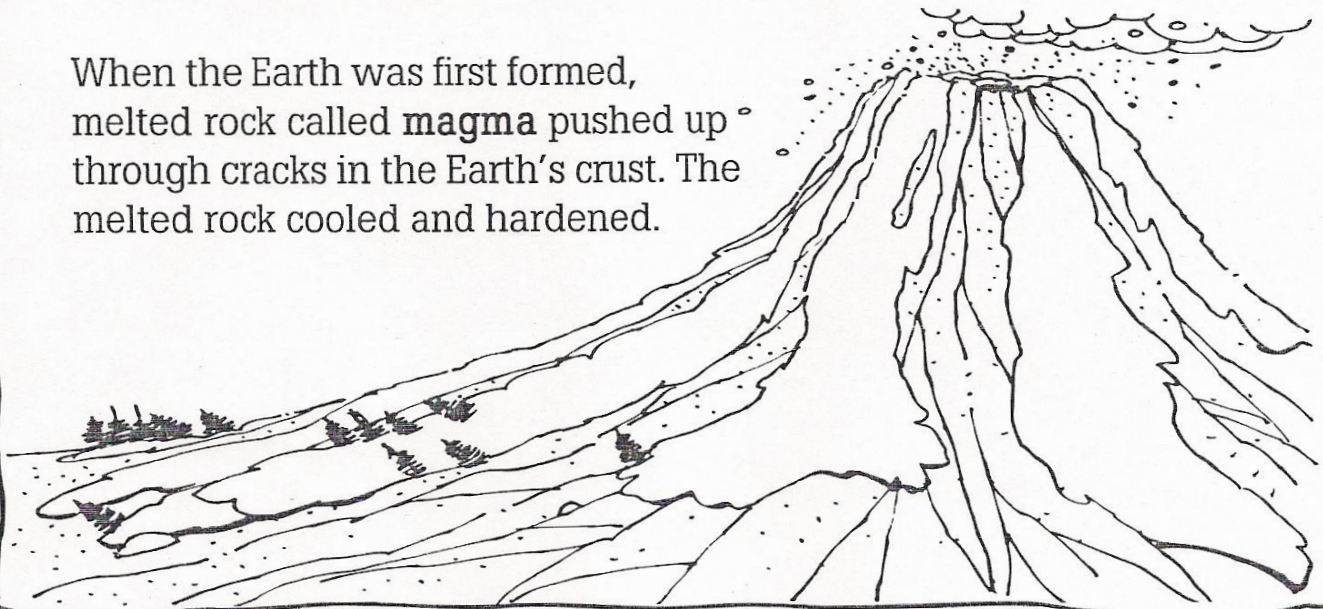
9. How long does it take for a rock to change?

Name _____

How Rocks Are Made

All rocks are a part of the Earth's crust.

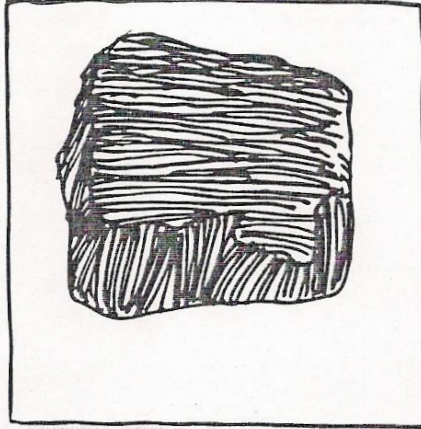
When the Earth was first formed, melted rock called **magma** pushed up through cracks in the Earth's crust. The melted rock cooled and hardened.



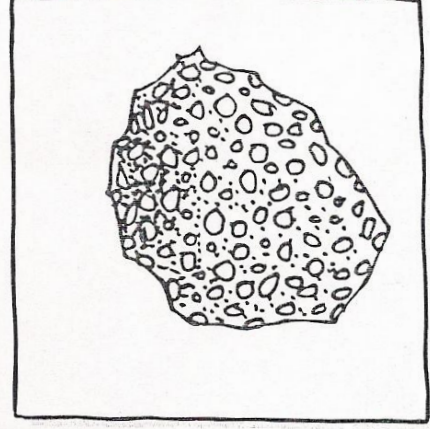
Igneous rocks still come from magma under the ground. Some igneous rock cools slowly underground. Some cool quickly on the surface.



Granite comes from magma. Granite is speckled. Some of the speckles shine. It is a heavy rock.



Basalt comes from magma. It is a black, heavy rock.



Pumice comes from lava shot out of a volcano. It cools with air bubbles in it. Because of the bubbles, it floats.

HOW ROCKS ARE MADE

1. What is melted rock called and where does it come from?

2. Name two igneous rocks formed from magma.

3. Name one igneous rock formed from lava.

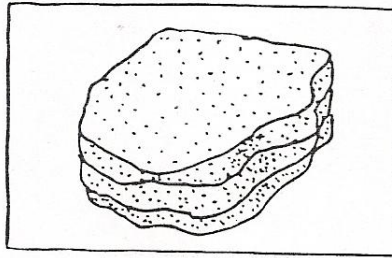
4. Which type of rocks contain fossils?

5. Name a rock made from seashells.

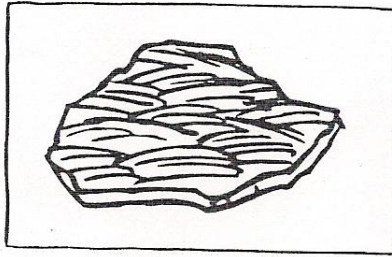
Sedimentary rocks are made from bits of rock that have been pressed together.

These rocks are made underwater. Layers of mud, sand, or even sea shells are built up over a long time. The layers get squeezed and stuck together to make new rocks.

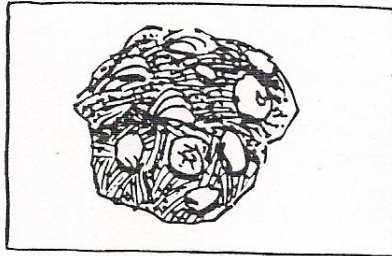
Many sedimentary rocks contain fossils.



Sandstone is made of layers of sand that have been squeezed into rock.



Shale is mud that has been squeezed into rock.

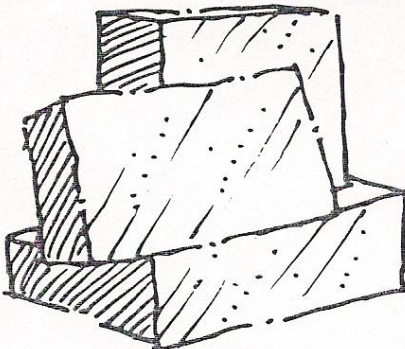


Limestone is made of sea shells. The sea shells sank to the bottom of the sea where they were pressed and stuck together.

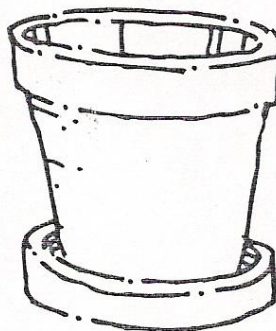
People use rocks for many things. Coal, used for energy, comes from certain rocks. Some buildings are made of rock. Rocks contain metals such as gold and silver. Some rocks contain stones that are polished and used in jewelry.

Granite is a hard rock used to build roads. Clay is a soft rock used to make pottery and bricks. Talc is a very soft rock used to make chalk and talcum powder.

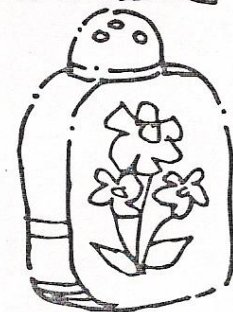
GRANITE



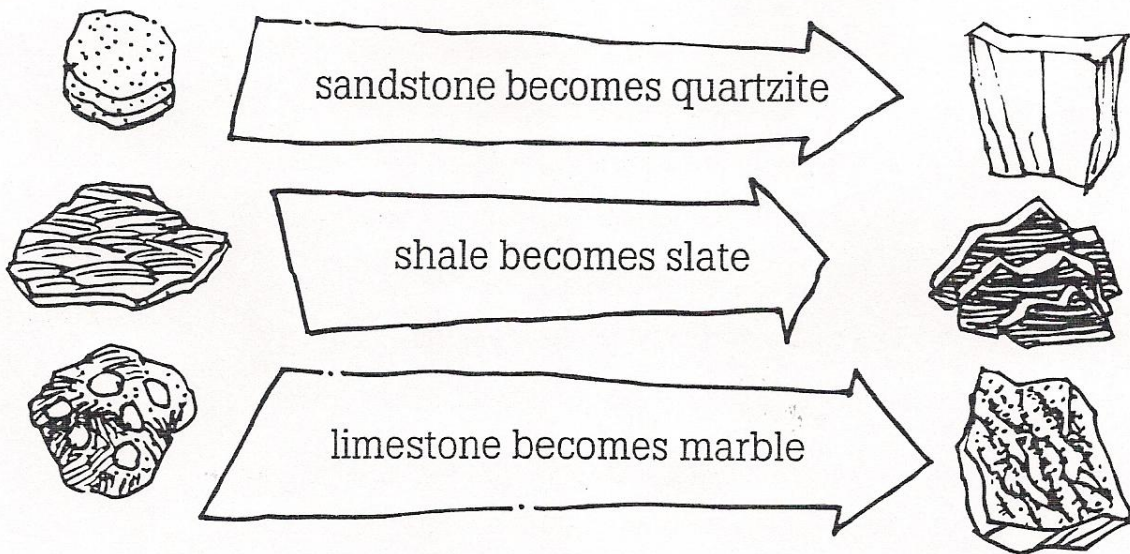
CLAY



TALC



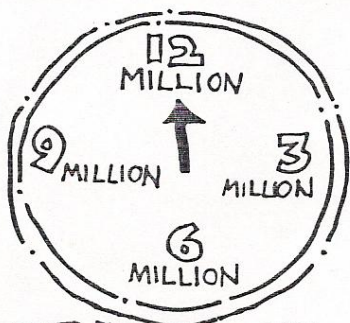
Rocks can be made in one more way. Sedimentary rocks can be changed by time, heat, and pressure under the surface of the Earth. These become **metamorphic** rocks.



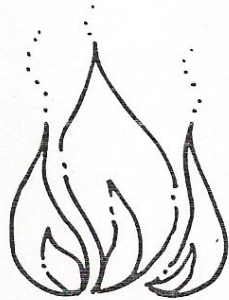
How much time does it take? — If you squeeze and heat a rock for a few million years, it can turn into a new kind of rock.

Where does the heat come from? — When rocks are close enough to the magma to be heated but not close enough to be melted, the rocks can be changed.

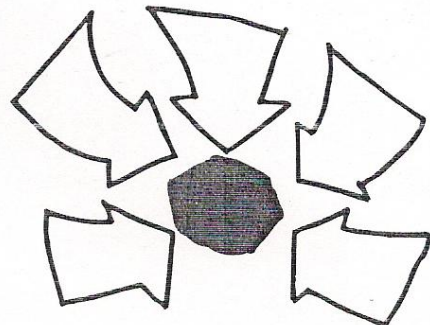
Where does the pressure come from? — Rocks below the surface are squeezed by the layers of rock above them. The thicker the layers, the more pressure there is.



TIME



HEAT



PRESSURE