

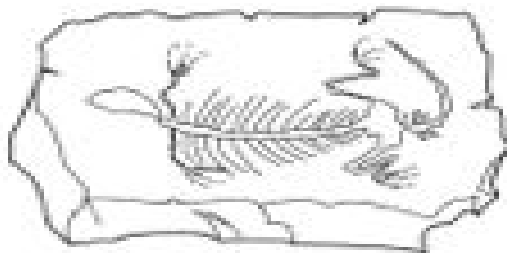
## Formation of sedimentary rock

Name: \_\_\_\_\_

These are three main types of rock: Igneous Rock, Metamorphic Rock and Sedimentary Rock.

### How sedimentary rock forms

Sedimentary rock is formed over a very long time. It is important because of the way it forms and the time it takes to form and preserve fossils within it.



These are the steps in the process of the formation of sedimentary rock:

#### Step 1: Soil and rock on the surface breaks down

This process is called erosion. Over time, big rocks break down into smaller pieces and eventually into grains. Erosion happens for many reasons:

- Plant roots grow in the cracks of a rock and force them to break apart as they grow
- Chemicals in the air or in the water cause them to break down into smaller pieces
- When wind bangs on rocks and when water streams onto them continually, they are broken down piece by piece

### Extend your knowledge

#### Igneous Rock

Igneous rocks are called 'fire rocks' and are formed either underground or above the ground. They are formed underground when the melted rock, called magma, deep within the earth, becomes trapped in small pockets. As these pockets of magma slowly cools, the magma becomes igneous rock. Ash and lava come out of a volcano. When the lava cools down it sets into solid rock. This type of rock is called igneous rock.

All igneous rocks are made of minerals. Each mineral consists of different chemicals. When these chemicals cool down, they form crystals.

#### Metamorphic Rock

Metamorphic rocks are rocks that have changed into another kind of rock. These rocks were once igneous or Sedimentary rocks. How do Sedimentary and igneous rocks change? The rocks are exposed to lots and lots of pressure, which creates heat buildup, which causes them to change. If you examine Metamorphic rock samples closely, you'll discover how flattened some of the grains in the rock are. Slate, marble and quartzite are some examples of Metamorphic rocks.