Types of Rock

This sheet is about the three main types of rock – sedimentary, igneous and metamorphic rocks. Read it, then copy the information into a table like the blank one below. Use **two** full pages.

	Sedimentary	Igneous	Metamorphic
Examples			
How formed			
Where found			
Interesting notes			

Sedimentary rocks

Rivers are able to carry bits of rock that have been weathered and eroded. These pieces of rock grind against each other and become rounded. The faster the river water flows, the larger the pieces of rock it can transport. When a river enters a lake or the sea, it slows down. Its load of rock fragments fall to the bottom, forming layers of pebbles, sand and mud. These **deposited** layers are called **sediments.**

The layers of sediment build up and are **buried** one on top of the other. They are **compressed**, and their weight squeezes out the water. Eventually (often after millions of years) the pieces of rock in the sediment become cemented together to form sedimentary rocks.

Example of sedimentary rocks: **sandstone** (from grains of sand)
limestone (contains the shelly remains of living creatures)
mudstone (from mud)

Sedimentary rocks are found in ancient dried out lakes and seas (which might now be buried underground). They often contain fossils as a result of moulds, traces and casts of animals and plants being trapped and preserved when the sediments were laid down.

Igneous Rocks

Igneous rocks come from molten rock called **magma**. The magma rises upwards from the mantle and, when it cools, solidifies into hard crystalline rock. There are two main types of igneous rock:

1. The magma comes from deep underground and is forced into the upper layers of the Earth's crust. It cools slowly here, and large crystals form. **Granite** is an example of this type of rock.
2. The magma erupts from a volcano. It cools quickly on the ground and only small crystals form. **Basalt** is an example of this type of igneous rock.

Metamorphic Rocks

Movements of the earth can cause rocks of all types (including sedimentary and igneous rocks) to become buried deep underground. Once they are underground, the rocks are subjected to high temperatures and/or high pressures. They do not melt, but their crystal structure and appearance change. Rocks that contain bands of crystals are likely to be metamorphic.

Other examples of metamorphic rock: **slate** (from mudstone)
marble (from limestone)

Metamorphic rocks can be found by mountain belts (because pressure and heat are involved when mountains are formed) and near volcanoes.