Rocks and Soils

Metamorphic Rocks - Metamorphic rocks are formed by great heat and pressure. They are generally found inside the Earth's crust where there is enough heat and pressure to form the rocks. Metamorphic rocks are often made from other types of rock. For example, shale, a sedimentary rock, can be changed, or metamorphosed, into a metamorphic rock such as slate. Other examples of metamorphic rocks include marble, anthracite, soapstone, and schist.

<u>Igneous Rocks -</u> Igneous rocks are formed by volcanoes. When a volcano erupts, it spews out hot molten rock called magma or lava. Eventually the magma will cool down and harden, either when it reaches the Earth's surface or somewhere within the crust. This hardened magma or lava is called igneous rock. Examples of igneous rocks include basalt and granite.

<u>Sedimentary Rocks</u> - Sedimentary rocks are formed by years and years of sediment compacting together and becoming hard. Generally, something like a stream or river will carry lots of small pieces of rocks and minerals to a larger body of water. These pieces will settle at the bottom and over a really long time (perhaps millions of years), they will form into solid rock. Some examples of sedimentary rocks are shale, limestone, and sandstone.

Key Facts	Key Vocabulary	Definition
Melted rock or magma is sent to the earth's surface by a volcano. It cools and forms an igneous rock.	Igneous	Rocks that were once so hot that they were liquid.
Next the weather, or a river, and other events will slowly break up this rock into small pieces of sediment.	Sedimentary	Formed from sediment left by water, ice, or wind.
As sediment builds up and hardens over the years, a sedimentary rock is formed.	Metamorphic	Rocks that have had their original structure changed by pressure and heat.
Slowly this sediment rock will get covered with other rocks and end up deep in the Earth's crust.	Pressure	Force that you produce when you press hard on something
When the pressure and heat get high enough, the sedimentary rock will metamorphose into a metamorphic rock and the cycle will start over again.	Properties	A quality that is shared by all rocks or soils of this type.
Igneous Rock Rock Cycle 4	Granite	Very hard rock used in building
	Properties of Soil Soil is often described using several characteristics including texture, structure, density, temperature, colour, consistency, and porosity. One of the most important properties of soil is the texture. Texture is a measure of whether the soil is more like sand, silt, or clay. The more like sand a soil is the less water it can hold. On the other hand, the more like clay a soil is, the more water it can hold.	

