

## ROCKS

**Minerals** by themselves are not the whole story, since they usually combine to form masses of rock. Minerals are substances that were never an animal or a plant and that were formed in the earth by nature. Iron, granite, and salt are minerals, as are as quartz or feldspar. They have a definite chemical composition and usually a definite crystal structure.

**Rocks** are combinations of various minerals that have been formed by heat or pressure in the earth. These larger combinations determine how our planet's crust looks and behaves. Using her or his knowledge of how rocks are formed can give a geologist a good idea of what that part of the earth was like in earlier times.

**There are three groups of rocks**—igneous, sedimentary, and metamorphic. Each of these grouping includes different varieties of rocks that were created in very different ways.

### IGNEOUS ROCKS

Igneous means relating to fire. Rocks of this group come into being when molten rock, known as magma, cools into a solid state and becomes hard. When magma moves to a cooler area, either under the ground or by breaking onto the surface of the earth as lava, it begins to harden. This change is from a molten state to a solid state. Magma that hardens under the surface of the earth is called intrusive rock. Examples of this kind of igneous rock are granite and gabbro.

Magma that travels all the way to the earth's surface through volcano is called lava. As the lava cools it becomes what is called extrusive rock. One example of extrusive rock is rhyolite. It is the extrusive equivalent of granite. Obsidian is another example of extrusive rock.

## INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Task 1 – Find the information about these intrusive rocks.

### a) granite

Translation :

Minerals in granite :

The usage :

The places in the Czech Republic where it is mined :

Mountains in our country :

### b) gabbro

Translation :

Minerals in gabbro :

The usage :

Mountains in our country :

Task 2 – Find the information about these extrusive rocks.

### a) basalt

Translation :

Minerals in basalt :

The usage :

Mountains in our country :

### b) andesite

Minerals in andesite :

Mountains :

### c) phonolite

Translation :

Minerals in basalt :

The usage :

## INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Mountains in our country :

building stone

sculptural stone

facing stone

cobble stone

grit

shatter

road stone

monument

plumbing / ducting

pavement