

# [Igneous rocks essay](https://assignbuster.com/igneous-rocks-essay/)

Associate Level Material Comparison Worksheet Use the following table to compare extrusive and intrusive rocks. Describe and compare each type in at least 150 words. Extrusive RockIntrusive Rock Extrusive rocks are also called volcanic rocks and extrusive rocks are formed on the earth’s surface. Extrusive rocks also form from magma, but a form of lava. Magma flows onto the earth’s surface by an eruption by a volcano. When the magma hits the earth’s surface, the magma turns into lava.

Extrusive rocks are formed by lava, and the lava will harden quickly and crystallize quickly, either by hot spots or on the earth’s surface. Igneous rocks are considered felsic, intermediate, mafic, and ultramafic. Felsic rocks are high in silica, and usually light colored, and an extrusive rock, which is felsic, is rhyolite. Intermediate rocks are lower in silica content than felsic rocks and an extrusive felsic rock example is andesite. Mafic rocks have a lower silica rate than intermediate rocks, and they are usually dark colored, and an example of an extrusive mafic rock is basalt.

Ultrafamic rocks are not generally extrusive rocks, but Peridotite is an intrusive rock, which is ultrafamic. Intrusive rocks are called plutonic rocks. Intrusive rocks are different than extrusive rocks and are formed underground, by magma, instead of above ground or how extrusive rocks are formed. Magma flows underground and sometimes the magma will stay in places underground and not be erupted by volcanoes. The magma which stays underground will harden for thousands of years, and an intrusive rock is the result, of the hardened magma.

Sometimes the intrusive rock will form crystals, which are very visible to the naked eye. Crystals form in intrusive rocks because they cool slowly. Igneous rocks can be felsic, intermediate, mafic, and ultramafic. Felsic rocks are high in silica, and are usually light colored, and an intrusive rock, which is felsic, is granite. Intermediate rocks are low in silica and are usually darker than felsic rocks, and diorite is an intrusive intermediate rock. Mafic rocks have low silica content and contain magnesium and iron, and an intrusive mafic rock is gabbro.

Ultramafic rocks are very low in silica and are usually dark colored, and obtain magnesium, and Peridotite is an intrusive ultramafic rock. Use the following table to compare faults and folds. Describe and compare each feature in at least 150 words. FaultsFolds A fault is a fracture in the earth. Faults can be several fractures in the earth. Faults are classified under two types of faults, dip-slip and strike-slip faults. Dip slip faults are a type of fault, which the slip of the fault is parallel with the dip of the fault.

Strike-slip faults are different than dip slip faults, and strike-slip faults have sections of the fault, which is horizontal or near horizontal. A type of strike-slip fault is the San Andreas Fault in California. Some faults are classified under different perspectives. Faults can be normal, reverse, thrust, and strike-up faults. A normal fault is faults which the rock above the fault surface moves downward relative to the block below. A reverse fault is where the block above the fault surface moves up and over the bottom block.

Thrust faults are classified as a reverse fault, but thrust faults have a shallow angle at the dip. Strike slip faults are faults where the movement of the rock is mostly parallel and horizontal to the strike of the fault. A fold in geology is a bend or deformed arrangement of stratified rocks, such as a wave. Some folds are classified as sedimentary rocks. A fold consists of three elements, two bends and one limb. Two of the limbs are the outside opposite ends, and the middle section is the limb. Folds are processes or tectonic structures, which is bent in two opposite directions.

Folds are found upward, downward, curved or inclined. . An arch is a fold, and which is upward and sometimes are classified as anticlines. A depression is a fold, which is downward. A monocline is a steep fold only moving in one direction. Folds are classified in three classifications, or vertical, inclined, and nonplunging Folds can be found in folded regions and cratons. Large folds are found along the edges of synclines and areas of the cratons. Some folds can affect the distribution of facies, thickness of sedimentary strata, and the accumulation of sediments in plate tectonics.

Folds are sometimes associated with petroleum deposits. Use the following table to identify extrusive and intrusive rocks with pictures. Pick at least two intrusive rocks and two extrusive rocks, and paste a picture of each rock into the Picture column. For each rock, describe the physical characteristics and write a 50- to 100-word explanation about how the characteristics prove whether it is an extrusive or intrusive rock. PicturePhysical CharacteristicsIntrusive or Extrusive? Intrusive Intrusive Extrusive Extrusive In 100 to 200 words, suggest how the game in the museum might work.