

THE ROCK CYCLE

Name _____ ^{answer} _____ Date _____

Use the word bank below, and the rock cycle diagram from page-2, to fill in the blanks in the following section on the three rock types and the rock cycle.

lava	time	pressure	change	extrusive	intense	underground
magma	pressure	intrusive	heat	layers	sediments	surface

When rocks and minerals are worn and broken down into small pieces by water, wind, or ice, the resulting particles are called sediments. The movement of these eroded particles to a new location is called deposition, which often results in distinct layers of sediments building up in a particular area. Sedimentary rocks form near the surface of the earth. It can take a lot of time but eventually, if sediments become compacted by pressure from the weight of water or overtopping earth, they can solidify into rocks like limestone, sandstone, and shale.

When a rock becomes buried deep underground by natural geological processes, conditions can arise that will change change the rock's chemistry, and turn it into a completely different kind of rock. Over much time, if enough heat and pressure build up around the old rock, it will eventually transform into a new, metamorphic rock, like marble, quartzite, or slate.

When rocks underground become exposed to the intense heat resulting from geological processes occurring in the earth's interior, they can actually melt. Melted, or molten rock located below the ground level is called magma, but if melted rock becomes exposed on the earth's surface through volcanic activity it is called lava. When magma is able to cool and solidify underground, it forms intrusive igneous rocks, like granite. When lava cools above ground extrusive igneous rocks, like basalt, obsidian, and pumice, are formed.