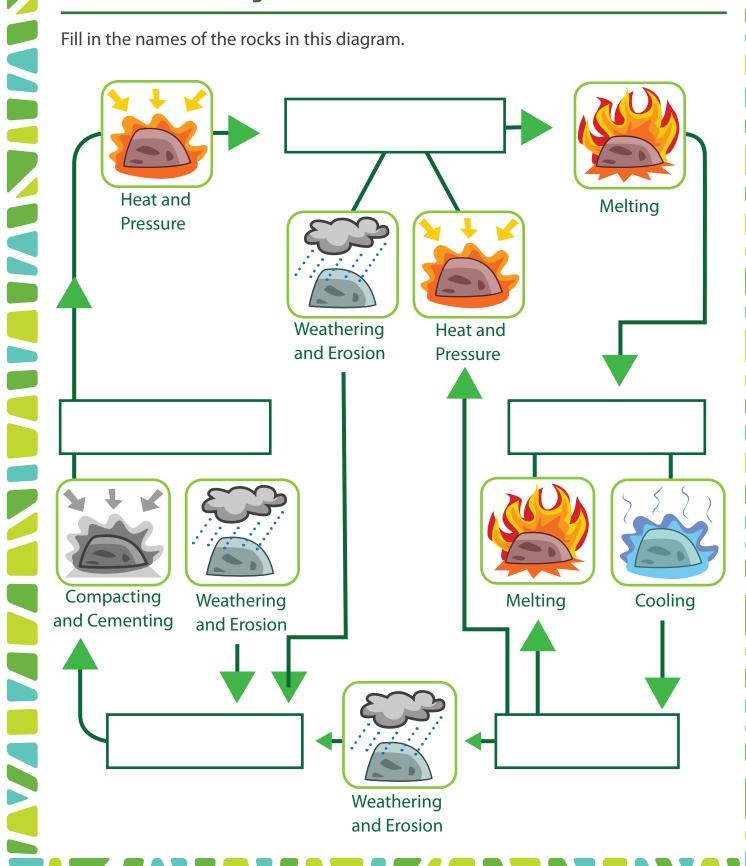


The Rock Cycle

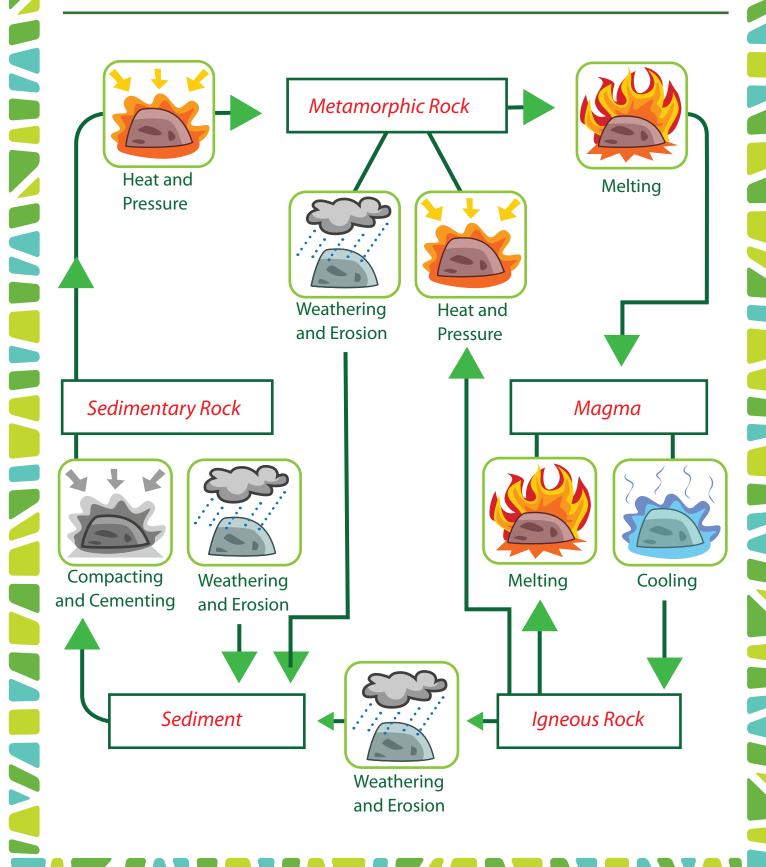
Fill in the names of the rocks in this diagram.







Answer:





Explain the steps of the rock cycle below.

Weathering and erosion – Igneous, sedimentary and metamorphic rocks are broken into smaller particles by wind and water. Sand particles in the wind rub against rocks and slowly break off particles like sandpaper. Rocks in running water lose their rough edges over time, turning into smooth pebbles. Water seeps into cracks in mountains and when it freezes, expands and cracks open the rocks. When the rock particles break down and stay in the same area, it is called weathering. When they are carried away by wind and water, it is called erosion.

Transportation – Eroded rock particles are carried away by wind and/or water

Deposition – When the wind and water slow down, the rock particles get deposited in a layer of sediment.

Compaction and cementation – As the layer of sediment becomes bigger, the weight and pressure compacts the particles at the bottom. Minerals fill in the gaps between the particles and then solidify, acting like cement. Over years, the sediment becomes sedimentary rock.

Metamorphism – Over time, sedimentary or igneous rocks end up buried deep underground (usually due to the movement of tectonic plates), where the high heat and pressure turns them into metamorphic rock.

Rock melting – Metamorphic rocks underground melt to become magma. When a volcano erupts, magma flows out of it and cools and hardens to become igneous rock. Once igneous rock is formed, the process of weathering and erosion begins again.