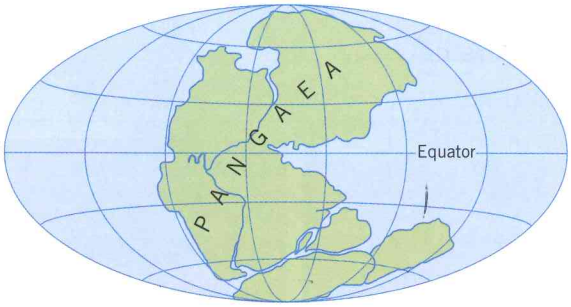
Shield Regions

Pangaea was built around old shield regions. These regions were created by widespread volcanic activity billions of years before. They are largely composed of **igneous rock**; that is, solidified magma. Later, heat and pressure altered some parts of these old shield regions. This formed **metamorphic rock**, or changed rock. As Pangaea broke apart, the shield regions were scattered across the earth as the core of the continents. Today, they are heavily worn and carved by the relentless forces of erosion—water, ice, and wind. Ancient shields, such as the Canadian Shield, often have widespread areas of bare rock.



Which continents can you recognize in ancient Pangaea?

Metamorphic rock shows the effects of heat and pressure from within the earth.

WORDS MATTER

igneous rock solidified magma from inside the earth

metamorphic rock changed rock

sedimentary rock thick beds of sediment that have slowly solidified into rock

Plains and Lowland Regions

The erosion of the shield regions created the rest of each continent. Rivers and glaciers carried eroded material, called sediment, into ancient seas. There, it accumulated into thick beds that slowly solidified into **sedimentary rock**. New land emerged around the ancient shields as the seas filled in. These plains and lowlands are underlaid by horizontal layers of sedimentary rock. Plains are broad areas of level land, such as the Great Plains region of central North America. Lowlands are plains located along coastlines, for example, the Great Lakes–St. Lawrence Lowlands.

Fold Mountain Regions

Look at a relief map of the world and you will see an amazing landform pattern. Great mountain chains cross the continents in bands. One chain runs the entire length of North America and South America, continuing into Antarctica. Another crosses Europe and Asia from west to east. These are the fold mountain systems of the world, huge crumpled ridges where plates collide.