

Quartz

From the Mountains to the Sea

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Abstract

The mineral quartz has been found from the mountains to the oceans and all across the world. There are various forms of quartz, all of which depend on the heat and pressure of the mineral's origin, as well as accessory elements. The forces of weathering and erosion have relocated quartz grains from the mountains to the beach. By exploring the quartz found at Pilot Mountain and in the Coastal Plain of North Carolina, one can draw relationships between the two locations. If the continents continue to move on their predicted paths as geologists have hypothesized, the loose sand at the beach may be metamorphosed into quartzite in hundreds of millions of years, and eventually become part of a mountain range again. This paper explores the relationship between quartz found at various locations in North Carolina and the cycle of their formation and reformation from rock to sand.