

Parry Sound

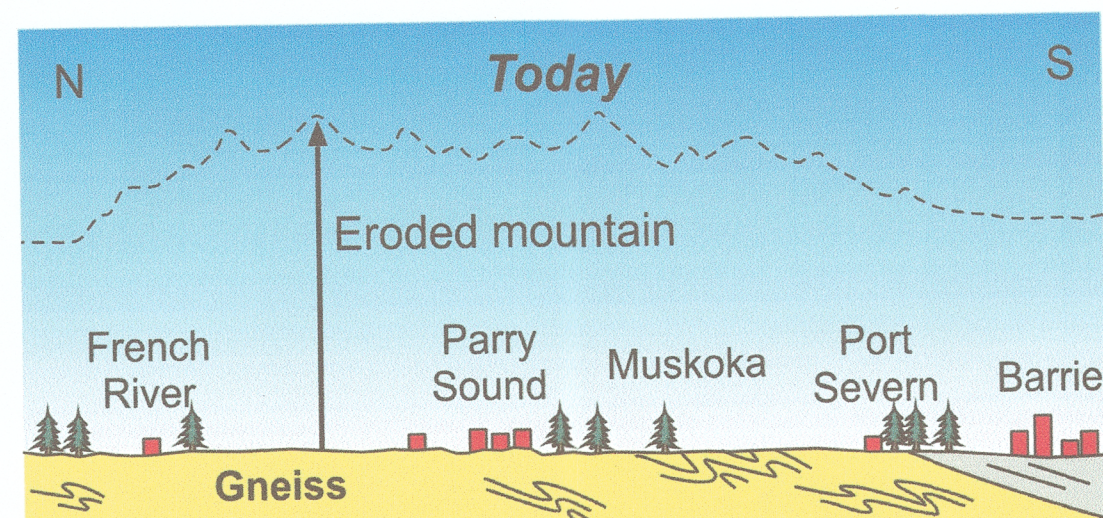
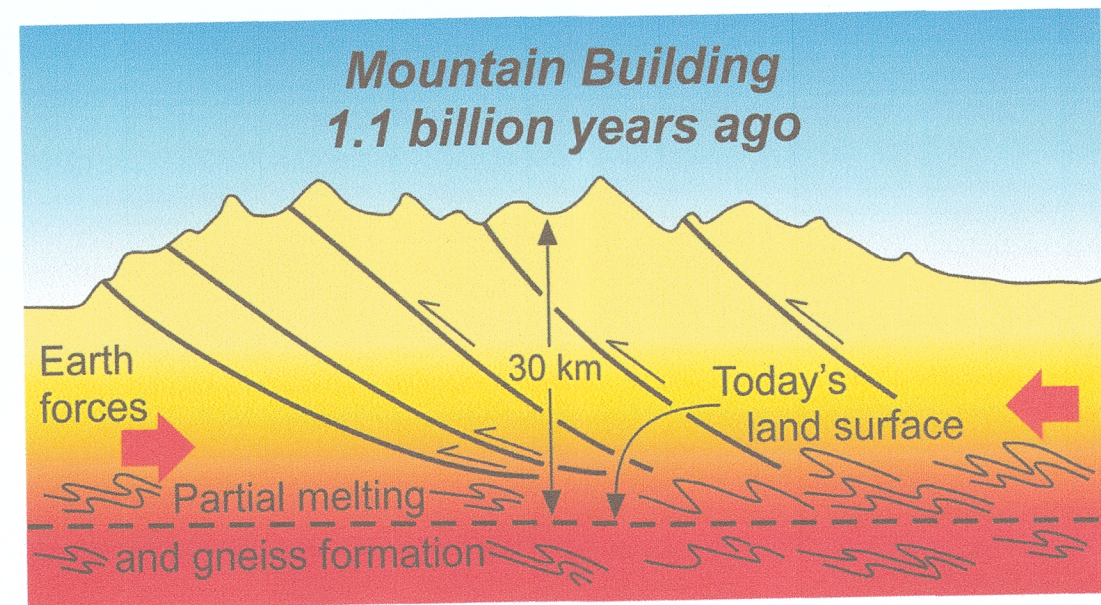
Gneiss: the iconic rock of Georgian Bay and Muskoka

Gneiss (pronounced "nice") is the iconic rock of the Canadian Shield in Ontario's cottage country. Gneiss is easy to distinguish from other rocks because of its alternating dark- and light-coloured layers, or bands. The lighter layers are granite-like and have a "salt-and-pepper" texture. This granitic texture tells geologists that the rock originated deep in the Earth at very high temperatures and pressures near the melting point of rock. The layers of gneiss are commonly contorted, suggesting conditions where forces within the Earth squeezed and deformed these rocks like modelling clay.



Gneiss with characteristic light and dark layers contorted into folds.

Parry Sound and Muskoka lie within a belt of gneiss that extends from Ontario to Labrador. Geologists have determined that this gneiss is the eroded remnants of an ancient mountain range that was similar in scale to the modern Himalayas. These mountains existed along the eastern edge of North America a billion years ago and have since been worn down by hundreds of millions of years of erosion. Today all that remains are the once deeply buried parts of these mountains, now exposed at the Earth's surface. These rocks give geologists a window into the rock-forming processes that take place deep within mountain belts.



Gneiss represents the eroded roots of ancient mountains. Mountains form because of compressive forces deep in the Earth's crust.