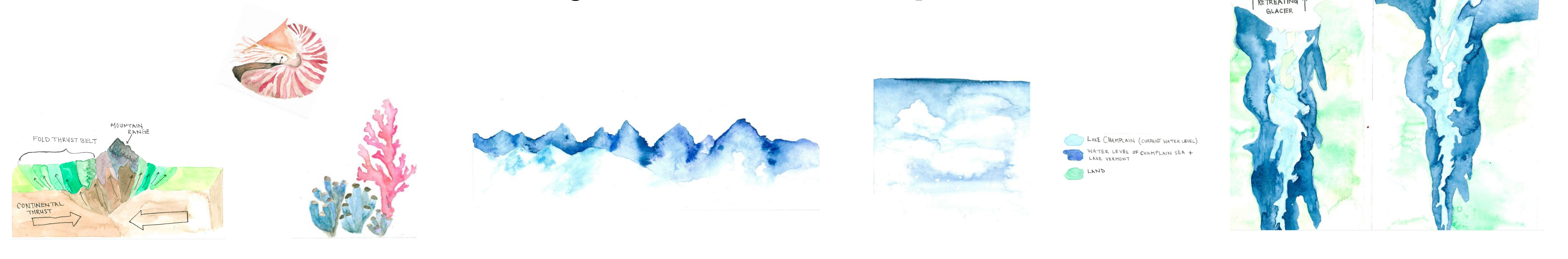


Geologic Timeline of the Lake Champlain Basin



Grenville Orogeny **Iapetus Ocean** **Green Mountains** **Adirondack Mountains** **Ice Age (Pleistocene)** **Lake Vermont** **Champlain Sea** **Lake Champlain**
 ~1 Billion Years Ago ~500 Million Years Ago ~450 Million Years Ago ~100 Million Years Ago ~ 2.5 Million Years Ago ~20,000 Years Ago ~13,000 Years Ago ~9,000 Years Ago

The collision of tectonic plates within the Earth's crust created mountains where the Adirondacks currently exist. These mountains were higher than the Himalayas are today (~20,000 ft).

A rupture in the Earth's crust and uppermost layer of the mantle caused the continental plates to pull apart. When the continents separated, magma, erupting from Earth's interior, formed new ocean full of rapidly evolving life.

The collision of tectonic plates caused the closure of the Iapetus Ocean and uplifted the Green Mountains.

Heat from the Earth's interior sparked the opening of the Atlantic Ocean which uplifted the Adirondacks, rejuvenating these ancient mountains.

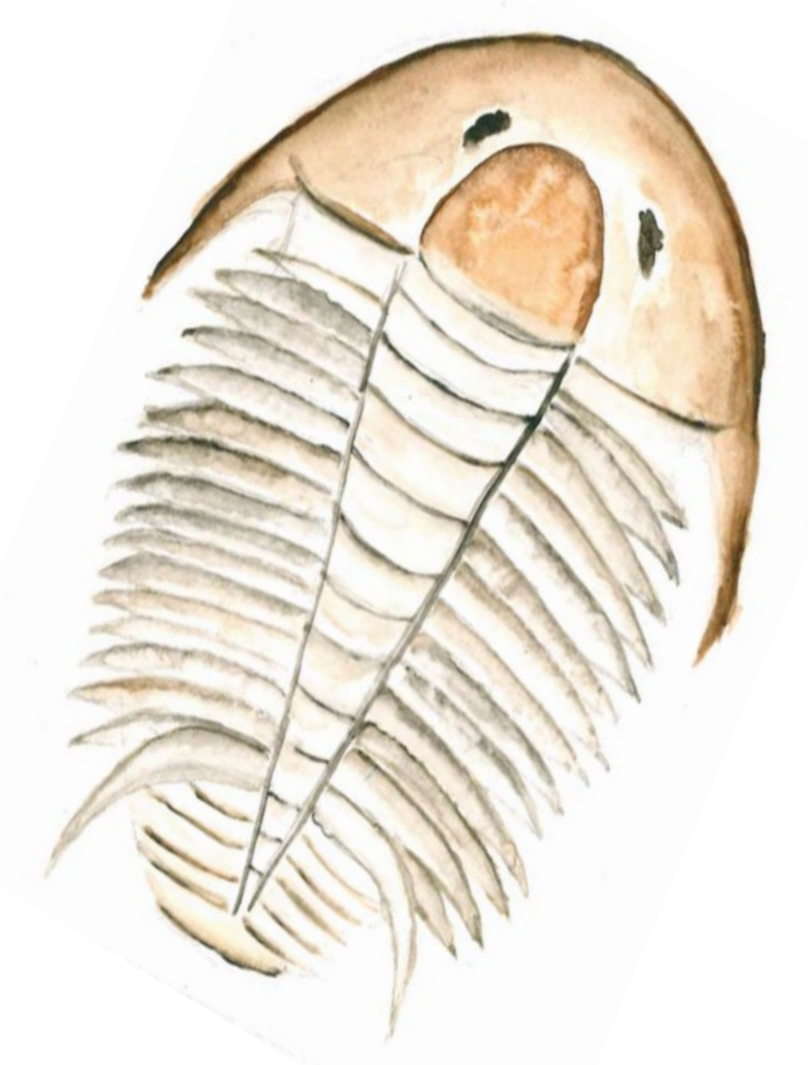
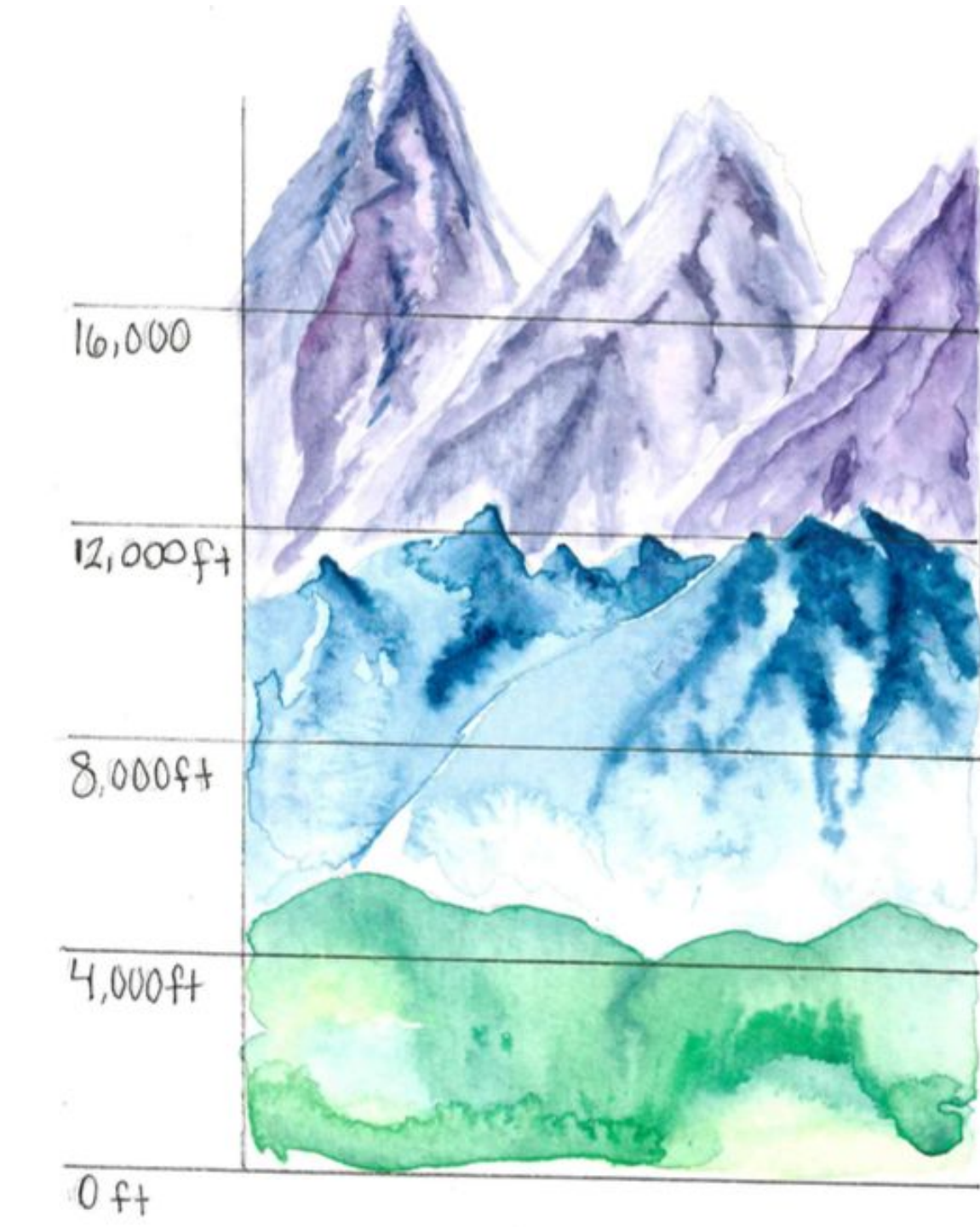
Glacial ice over 1 mile in thickness covered the Adirondacks and Green Mountains.

A large lake called Lake Vermont formed in the area between the ice to the north and the glacial debris to the south as the glacier retreated to the north.

The weight of glacial ice depressed the land and allowed sea water to flow south through the St. Lawrence and Richelieu River into the Champlain Valley, forming the Champlain Sea.

As the Earth's surface rebounded from the removal of the weight of glacial ice, the connection to the ocean was severed.

The waters of the Champlain Sea gradually freshened and Lake Champlain formed.



Charlotte Whale
 White beluga whale skeleton discovered in Charlotte, VT 1849

