North Carolina can be divided into three physiographic provinces, the Coastal Plain, the Piedmont, and the Blue Ridge. Each province is characterized by particular types of landforms.

The Coastal Plain is characterized by flat land to gently rolling hills and valleys. Elevations range from sea level near the coast to about 600 feet in the Sand Hills of the southern inner Coastal Plain.

The Piedmont Province lies between the Coastal Plain and the Blue Ridge Mountains. The Piedmont Province's southern boundary is located at an altitude of 600 feet above sea level. Along the border between the Piedmont and the Coastal Plain, elevations range from 300 to 600 feet above sea level. To the west, elevation gradually rises to about 1,500 feet above sea level at the foot of the Blue Ridge. The Piedmont is characterized by gently rolling, well-rounded hills and low-lying valleys with a few isolated peaks on the coastal plains and the hills and valleys. The Piedmont includes some relatively low mountains including the South Mountains and the Uwharrie Mountains.

The Blue Ridge is a deeply dissected mountainsous area of numerous steep mountain ridges, intermontane basins and valley troughs which intersect at various angles and give the area its rugged mountain character. The Blue Ridge contains the highest elevations and the most rugged topography in the Appalachian Mountain system of all eastern North America. The Carolina Piedmont Province of the Blue Ridge is about 300 miles long and ranges from 15 to 55 miles wide. It contains an area of about 6,000 square miles, or about 10 percent of the area of the state.

Within North Carolina, 43 peaks exceed 6,000 feet in elevation and 82 peaks are between 5,000 and 6,000 feet. On the west, the Great Smoky Mountains is the dominant range with several peaks that reach nearly 6,000 feet. On the eastern side of the North Carolina Blue Ridge, the highest range is the Black Mountain range which extends for 40 miles and contains a dozen peaks that exceed 6,000 feet in elevation. This group includes Balsam Mountain (6,664 feet), the highest peak in the east, which rises about 10,500 feet in elevation. Foothills extend from the Blue Ridge Mountains to the Nantahala Mountains, Nantahala Mountains, Snowbird Mountains and the Valley River Mountains.

Geology
Three major classes of rocks common to North Carolina are the ancient, metamorphic and sedimentary, and more recent volcanic and intrusive rocks. North Carolina has a long and complex geologic history. Although many remnants are to be learned, detailed geologic studies provide a general understanding of regional geologic settings. The state is best described in terms of geological belts, that is, areas with similar rock types and geologic history.

Blue Ridge Belt: This mountainous region is composed of rocks from over one billion years ago. It is the oldest of the three belts and contains metamorphic and sedimentary rock. The Blue Ridge Mountains have been eroded and rocky outcrops are scattered throughout the region.

Inner Piedmont Belt: The Inner Piedmont belt is the most intensively deformed and metamorphosed segment of the Piedmont. The metamorphic rocks range from 500 to 750 million years old. They include gneiss and schist that have been intruded by younger granite rocks.

Outer Piedmont Belt: This is the most extensive of the Inner Piedmont belts. It contains sedimentary and metamorphic rocks that are younger than the Inner Piedmont belts.

Mineral Industry
North Carolina has important deposits of many minerals and annually loads the nation in the production of lead, zinc, iron, copper and other essential metallic non-ferrous and iron-ore. The state ranks second in phosphate rock production and ranks in the top five in clay and crushed-granite production. North Carolina does not produce significant quantities of metallic minerals.

Geologic Time Scale for North Carolina

<table>
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<tr>
<th>Era</th>
<th>Period</th>
<th>Deposits of sedimentary rocks and the Piedmont from 1.5 to 0.5 billion years old.</th>
<th>Fossils and other evidence of life are abundant in the rocks of this period.</th>
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<tbody>
<tr>
<td>Pre-Cambrian</td>
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