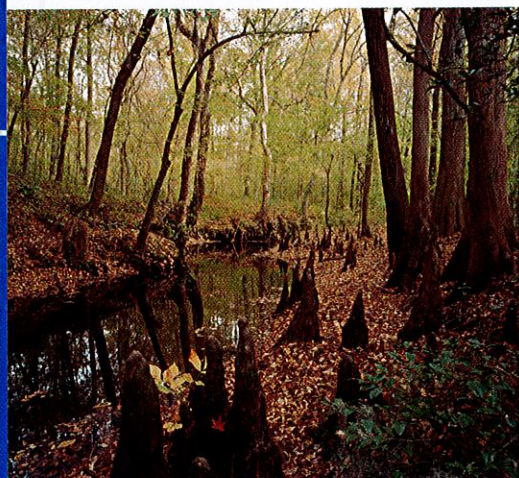


# Land Features



**Figure 5** Western Coastal Plain Woodlands

North Carolina's nearly 140,000 square kilometers contain many landscapes—from wide, sandy beaches to high mountain meadows. From the Atlantic Ocean to the top of Mt. Mitchell, North Carolina has the greatest range of altitude of any state east of the Mississippi River. North Carolina is divided into three regions based on landforms and topography—Coastal Plain, Piedmont, and Blue Ridge Mountains. The eastern Coastal Plain is a flat, poorly drained area of estuaries, swamps, and beaches. Moving westward, the Coastal Plain becomes slightly higher—from about 90 to 190 meters above sea level. The Piedmont is a broad plateau with gently rolling hills and low mountains that rise west of the Coastal Plain. The Blue Ridge Mountains dominate the western end of North Carolina. The Blue Ridge, Great Smoky, Black, and Unaka mountains are part of the Appalachian chain. The Appalachians are wider and higher here than in any other state.

## The Coastal Plain

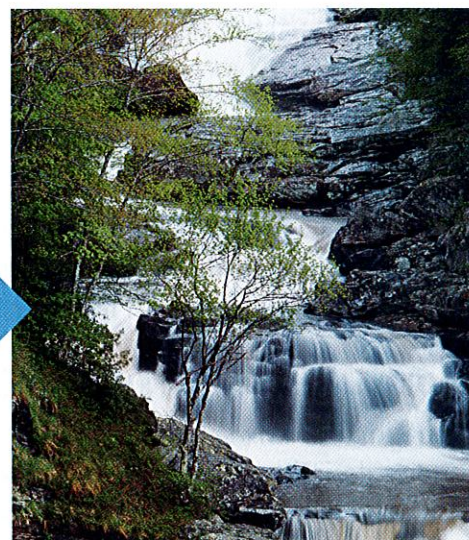
The Coastal Plain consists mostly of sedimentary rocks. This landform covers the largest portion of the state. The primary sediments are sand and clay, with some limestone. Higher areas of the western Coastal Plain support pine and oak woodlands. Much of the natural forest of this region has been cleared for farms.

## The Fall Line

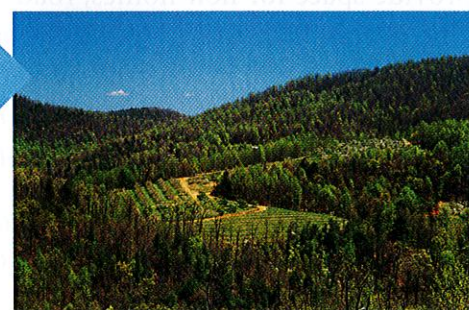
The fall line is a zone 48 kilometers wide that forms the border between the flat, low Coastal Plain and the higher and hillier Piedmont. As rivers and streams drop from the Piedmont to the Coastal Plain, they tumble over rapids and small waterfalls. Centuries ago, when water was the most important means of transportation, boats could travel from the coast as far as the fall line. There they had to transfer cargo to wagons. Many towns in North Carolina, such as Raleigh, grew on the fall line to serve this trade.

## The Piedmont

Several low sets of hills dominate the landscape of the Piedmont. Elevations range from 90 to 450 meters above sea level at the foot of the Blue Ridge. This region shows the greatest variety in rock types. The western border is characterized by metamorphic processes resulting in highly deformed rocks such as gneisses and schist, with granites. Moving east, one finds belts of igneous rock, heated deformed volcanic rock, and sedimentary rock.



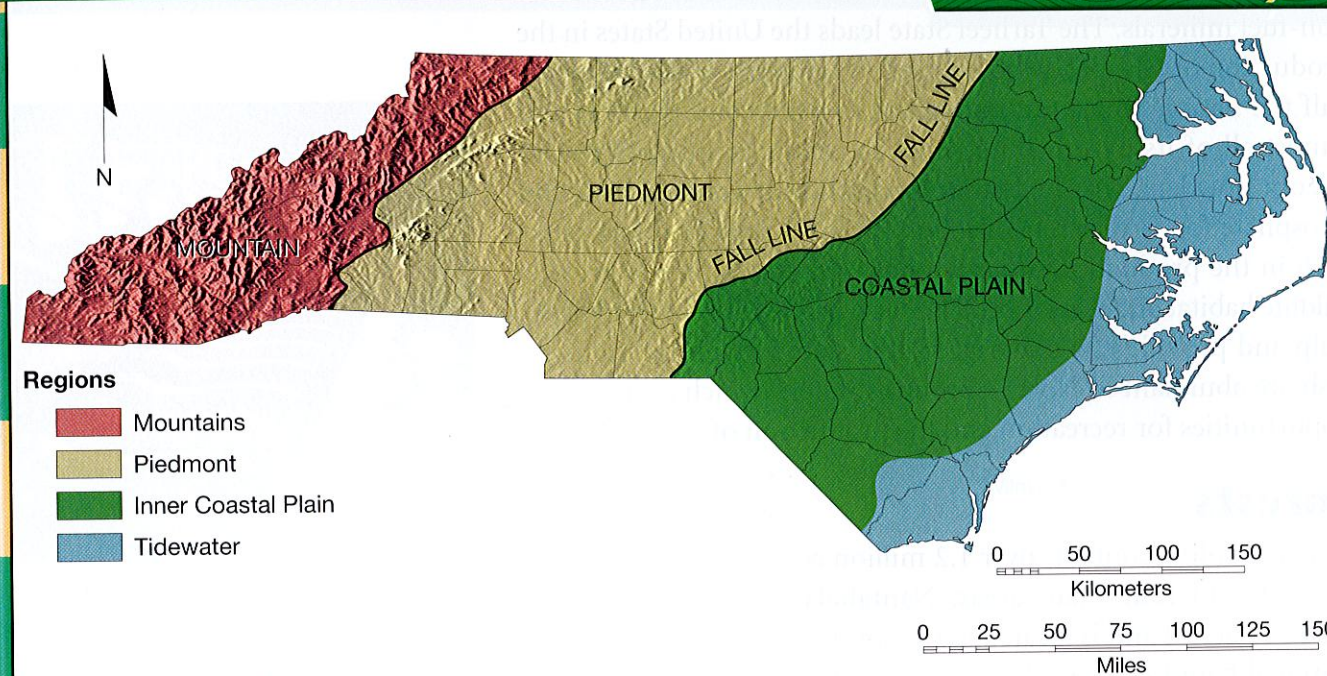
**Figure 6** Fall line rapids



**Figure 7** The Brushy Mountains in Alexander County

## North Carolina: Physical

## MAP MASTER Skills Activity



**Figure 8**

**Regions** This map shows the major physical features and physiographic regions of North Carolina.

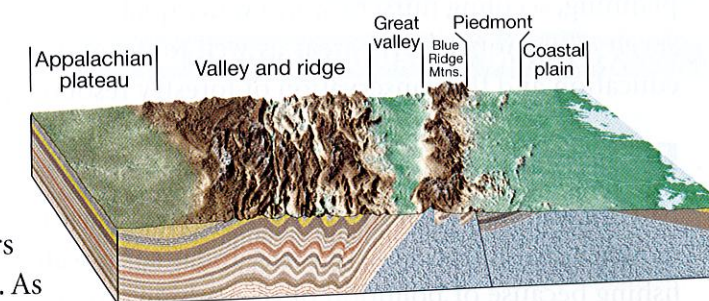
**Describe** How does elevation in North Carolina change as you move from east to west?

**Compare and Contrast** Which are North Carolina's two largest physiographic regions?

**Locate** In which region is the eastern continental divide? What type of landform do you think the eastern continental divide is?

## The Appalachian Mountains

Sixty-five millions years ago, the original Appalachian Mountains had eroded to a low plain. About 30 million years ago, the upwarping began that formed the modern Appalachian range. As the height of the land increased, the base levels of rivers and streams changed in relation to the Coastal Plain. As water flowed, erosion gradually changed the surface to create the landforms we see today. Heavy sedimentation occurred along the eastern margin of North America. This sedimentation gave rise to the gently sloping Coastal Plain.



**Figure 9** Erosion of raised layers and masses of rock have produced today's Appalachian topography.



**Reading Checkpoint**

List the three main physiographic regions of North Carolina.