Name_____

Geological Features of PA Study Guide

Appalachian Mountains

Mountains, such as the Appalachian Mountains, can be created by the collision of crustal plates. Pressure has caused the Appalachian Mountains to form numerous linear ridges and valleys. Scientists believe that the Appalachian Mountains used to be higher than the Rocky Mountains. However, scientists think that the Appalachian Mountains were worn down and rounded by weathering and erosion. Erosion also created ridges and valleys in the Susquehanna lowlands, in places such as Columbia County. Sandstone, a very hard rock, is found on Appalachian Mountain ridges. Softer rock, such as limestone, has been eroded and placed into valley regions.

Susquehanna River/Waterfalls

Rainfall, runoff and underground water keep the Susquehanna River flowing. Most rivers, such as the Susquehanna River, begin as a narrow waterway in a hilly area. The Susquehanna River begins as a V-shaped Valley at Ostego Lake in New York. As the Susquehanna River continues, it becomes larger as tributaries flow into the Susquehanna. A **tributary** is a smaller creek, stream or river that flows into a larger body of water. The Susquehanna then becomes a flood plain before developing meanders and flowing into the Chesapeake Bay. The Susquehanna River widens as the river wears away sediment.

Scientists think the Susquehanna River may be the second oldest major system in the world. The flow of the Susquehanna may have been so strong that it cut through the Appalachian Mountains, forming various valleys.

Central Pennsylvania has many waterfalls. Waterfalls form over layers of hard rock not worn away by moving water.

Glaciers in Pennsylvania

Glaciers form when new snow pushes air out of layers of older snow. White glacier ice then forms. Glaciers are filled with dirt and debris. Glaciers are large, heavy and slow moving. Currently, glaciers form in the north and south poles; however, glaciers existed during the Ice Age in Pennsylvania. Scientists believe that glaciers carved U-shaped valleys and helped round mountains and hills in central Pennsylvania. Glaciers blocked the flow of streams and rivers, causing flooded water to form ponds and lakes. Glaciers also dropped rocks and dirt in various areas in central Pennsylvania.