



- LAKE SUPERIOR REGION**  
(Includes northwestern Minnesota)
- Alluvium and glacial drift  
Drift mapped only where bedrock is deeply covered
  - Upper Cretaceous rocks
  - Upper Ordovician rocks
  - Upper Cambrian or St. Croixian rocks
  - Sandstone and conglomerate  
Bedrock that underlies Minnesota
  - Volcanic rocks  
Lava flows, basaltic dykes
  - Upper Huronian rocks  
Siltstone, iron-bearing beds, some volcanic rocks
  - Middle Huronian rocks  
Sedimentary rocks, iron-bearing beds, volcanic rocks, basalt, dike, and basaltic siltstone
  - Lower Huronian rocks  
Sedimentary rocks, north of Lake Superior may be pre-Huronian
  - Pre-Cambrian intrusives  
Apatite-bearing rocks, mostly acidic intrusives, include some granites
  - Keweenaw series  
Bly granitoid and other basic volcanic rocks

- GREAT LAKES REGION AND UPPER MISSISSIPPI STATES**  
(Includes southeastern Minnesota, northeastern Iowa, southern Wisconsin, northern Illinois and Indiana, Michigan, and west-central New York)
- Rocks of Conemaugh age  
Metasedimentary formation in Illinois and Kentucky; Westphalian sandstone and red beds of possibly Pennsylvanian age in Michigan
  - Rocks of Allegheny age  
Carboniferous formation in Illinois and Kentucky
  - Pottsville formation  
Devonian formation in Illinois and Kentucky
  - Rocks of Chester age  
Mississippian
  - Rocks of Meramec age  
St. Louis, Osage, or Jersey; Meramec and St. Genevieve; Meramec and St. Louis; Meramec and St. Louis; Meramec and St. Louis
  - Rocks of Onaga and Kinderhook age  
Carboniferous and Devonian rocks and Devonian sandstone in Michigan; Kinderhook group ("Red Hill") in Michigan; Onaga and Kinderhook in Illinois; Onaga and Kinderhook in Illinois; Onaga and Kinderhook in Illinois
  - Rocks of Portage to Catskill age  
Auriferous shale in Michigan and Ohio; Onaga and Kinderhook in Illinois; Onaga and Kinderhook in Illinois; Onaga and Kinderhook in Illinois
  - Rocks of Hamilton to Onondaga age  
Finger Lakes formation in Michigan and Minnesota; Onaga and Kinderhook in Illinois; Onaga and Kinderhook in Illinois; Onaga and Kinderhook in Illinois
  - Rocks of Helderberg age  
Deviant River dolomite and Onondaga sandstone in Michigan and Ohio
  - Rocks of Cayuga age  
New York dolomite in Michigan and Ohio
  - Rocks of upper Niagara (Lockport) age  
Bellefleur limestone in Wisconsin; Westphalian dolomite of Cayuga age, bedded in sandstone in Wisconsin
  - Rocks of lower Niagara (Clinton) and upper Medina age  
Albion sandstone in New York and Westphalian limestone in Ohio; Onaga and Kinderhook in Illinois

- NEW ENGLAND AND THE ADIRONDACKS**
- Sand and glacial deposits  
Wind-blown sand and gravel in Cape Cod and Long Island
  - Newark group  
Chicago shale, Onondaga limestone, Onondaga sandstone, Onondaga limestone, Onondaga sandstone
  - Intrusive diorite  
Includes some basalt flows
  - Late Paleozoic intrusives  
Carboniferous and Silurian
  - Late Paleozoic volcanic rocks  
Troutyale, rhyolite, andesite, diorite
  - Devonian rocks  
Berkshire formation in Massachusetts
  - Silurian rocks
  - Shale and limestone of Utica and Lorraine age
  - Limestone of Trenton to Chazy age
  - Beekmantown limestone
  - Potomac sandstone and Upper Cambrian limestone
  - ADIRONDACKS  
Adirondack batholith  
Auriferous and goldiferous
  - Older igneous rocks  
Granite and gneiss, some later intrusions included
  - Greenville series  
Limestone and schist
  - ADIRONDACKS  
Phyllite  
Age unknown
  - Younger sedimentary schists  
Some early Paleozoic rocks may be included
  - Older sedimentary and igneous gneisses

- REGION WEST OF CHAMPLAIN OVERTHRUST**
- Shale of Richmond age  
Berkshire shale
  - Rocks of Trenton and Black River age  
Galena dolomite, Onondaga limestone, Onondaga sandstone in Illinois, Wisconsin, Michigan, and Iowa
  - St. Peter sandstone
  - Prairie du Chien dolomite
  - Upper Cambrian or St. Croixian rocks
  - Early Paleozoic volcanic rocks  
Finger Lakes dolomite, Onondaga limestone, and other Silurian rocks; Onondaga limestone and St. Peter sandstone, Cambrian
- EASTERN NEW YORK**
- Rensselaer grit  
Age undetermined; has been regarded as Devonian but may be Lower Cambrian, overlain with Cambrian and Ordovician of similar sequence