



mineral **feldspar** has several relatively rare varieties found in Pennsylvania that are sold as the gemstones sunstone and moonstone. Amethyst, smoky quartz, agate, garnet and **beryl** are also found in the region. Beryl is common in granites and pegmatites and comes in a variety of colors.

## Feldspars

*Feldspar is an extremely common, rock-forming mineral found throughout the Northeast in igneous, metamorphic and sedimentary rocks. There are two groups of feldspar: alkali feldspar (which ranges from potassium (K)-rich  $KAlSi_3O_8$  to sodium (Na)-rich  $NaAlSi_3O_8$ ) and plagioclase feldspar (which ranges from sodium (Na)-rich  $NaAlSi_3O_8$  to calcium (Ca)-rich  $CaAl_2Si_2O_8$ ). Potassium feldspars of the alkali group are commonly seen as pink crystals in igneous and metamorphic rocks, or pink grains in sedimentary rocks. Plagioclase feldspars are even more abundant than the alkali feldspars, ranging in color from light to dark. Sunstone and moonstone, gem varieties of plagioclase feldspar, are found throughout the Appalachian/Piedmont region, particularly in Pennsylvania.*

**beryl:**  $Be_3Al_2(Si_6O_{18})$

*Though not found in the Northeast, the precious stone emerald is the green variety of beryl.*

*Feldspars are commercially used in ceramics and scouring powders.*

## Mineral Resources of the Coastal Plain Region 3

The Coastal Plain region of the Northeast has very few mineral producing localities. Gypsum and magnesium compounds are the extent of the current mineral production, and kaolin was produced in the past in Maryland. The Coastal Plain, made entirely of a wedge of loose sediments (not cemented or compacted sufficiently to have become sedimentary rock), does not have the abundance of valuable minerals and ores found in igneous and metamorphic rocks, nor the proper conditions to create such minerals. Unlike the other regions, minerals are concentrated in the Coastal Plain only through density separation by streams and wave action along the shoreline.

see *Rocks*, p.46,  
for more on the  
**Coastal Plain**  
sediments.

