Orthoclase

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General Mineral Formula: $KAlSi_3O_8$

Mineral Chemical Class: Tectosilicates

Specific Gravity: 2.6

Hardness: 6

Cleavage: 2,1 prismatic/basal, 3,1 pinacoidal. About 90 degrees

Luster: Vitreous to pearly

Streak: White

Characteristic Color(s): White, yellow, colorless, pink & more

Crystal System: Monoclinic

Crystal Class: $2/m$

Crystal Description (common forms, habit, etc.): Occurs in well-shaped prismatic and tabular crystals. Crystals often form penetration twins and repeated twins. Also occurs in massive, grainy waterworn stones.

Environment (where you find the material: Major part of low-temp. metamorphic rock. Also igneous environments

Common Mineral Associations (in samples, also consult text, notes: Quartz, Muscovite, Plagioclase, Feldspars, Biotite, and Garnet.

Scientific Usage/Significance: Orthoclase crystals and twins provide info about the formation of minerals and environmental factors.

Industrial or Social Use/Significance: Important in manufacture of glass & ceramics.

Environmental Significance: Common alteration product is clay.