

Felsic Encyclopedia Article

Felsic

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.

Contents

Felsic Encyclopedia Article.....	1
Contents.....	2
Felsic.....	3

Felsic

Geologists sometimes find it useful to classify **igneous rocks** based on color. Because color is sensitive to minor chemical differences it is not a very reliable index to the history or composition of any given **rock**; however, it has the merit of being obvious at a glance, making color classification an indispensable aid to describing rocks in the field. **Minerals** are classed in two general color groups: felsic (light) and **mafic** (dark). Rocks may contain a mixture of mafic and felsic minerals, and are termed felsic if felsic minerals predominate, mafic otherwise. Alternatively, a numerical color index can be assigned to a rock based on visual estimation of the percentage of mafic or felsic minerals it contains.

Felsic minerals are usually higher in silica (SiO_2) and **aluminum** and of lower density than mafic minerals. Common felsic minerals are **quartz**, **feldspar**, and the feldspathoids, and common felsic rocks (i.e., rocks high in felsic minerals) are **granite** and **rhyolite**. Mafic minerals are usually higher in **iron** and magnesium than felsic minerals; common mafic minerals are pyroxene, amphibole, **olivine**, mica, and biotite, and common mafic rocks are **basalt** and gabbro.

The term mafic is also used in a precise chemical sense, that is, to denote rocks consisting of 45–52% silica regardless of color. Since the non-silica fraction of a rock often consists largely of iron and magnesium compounds, rocks that are mafic in the chemical sense are usually also mafic in the color sense.

See Also

Silicic