Prism Encyclopedia Article

Prism

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

Prism Encyclopedia Article.....1

Contents.....2

Prism.....3

Prism

A prism is a clear solid used to manipulate the path of a light ray, either by bending it, splitting it, or polarizing it. Generally, the light ray is reflected one or more times within the body of the prism, an effect known as *total internal reflection*.

Prisms can be found in a wide variety of shapes and sizes and can possess a number of sides. Any prism whose lateral faces are perpendicular to the base is called a *right* prism; other prisms are called *oblique* prisms. Most are made of glass or quartz and are at least partially transparent, allowing light to pass through the body.

One of the best known prismatic effects is the rainbow. When a rainbow occurs, thousands of tiny drops of water suspended in the air act as prisms, splitting sunlight into its color spectrum. In addition to separating colors, prisms, such as those used in binoculars and telescopes, help to bend and direct light, as well as to correct color aberrations.

One particular prism, the *Nicol prism*, is used to convert simple light into polarized light. Invented by the Scottish scientist William Nicol, this device is actually composed of two prisms cemented together with *Canadian balsam*; the completed system has the effect of polarizing light along a certain plane.