Background Radiation Encyclopedia Article

Background Radiation

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

Background Radiation Encyclopedia Article.....1

Contents.....2

Background Radiation.....3

Background Radiation

Background **radiation** is the low intensity radiation from the small amounts of **radioisotopes** in the environment to which we are all exposed.

Background radiation is a result of naturally occurring **radioactive decay** from a number of elements found in the air, rocks, soil, and in all living things, as well as a component of bombardment by **cosmic rays**. There is also an amount that has been added by humans. This latter radiation comes from all uses that **radioactivity** is put to, from nuclear bombs to power stations, x-ray machines, and irradiation of food. The greatest component of background radiation is naturally occurring radon gas. This accounts for 55% of all background radiation. The next largest component at 11% is medical x-rays, which is the same level of contribution as radioisotopes naturally occurring in the human body. The level of exposure to background radiation for a person for one year is approximately 360 mrem. A typical dental x-ray would be the equivalent of 0.5 mrem. There are no detectable clinical effects for a short term exposure to **ionizing radiation** below 25 rem. Since the 1940s when nuclear material started to be used by humans the level of background radiation has increased by a tiny amount. This increase has to be taken into account when calculating dates using the carbon-14 dating technique, but, other than such techniques that rely on measuring minute quantities of radioactive material, the increase in background radiation has had no noticeable affect.

Background radiation is mostly natural levels of radiation which have been around throughout most of the history of the planet.