Diamonds  
By Eli Mirzoeff  
  
A [diamond](http://en.wikipedia.org/wiki/Diamond) is a crystal lattice of carbon—a mineral formed deep in the Earth’s mantle under tremendous pressure and high temperature and brought to the Earth’s surface over billions of years, most commonly via volcanic processes. Diamond has the highest hardness and thermal conductivity of any naturally occurring mineral, making it a choice material for industrial applications. Nonetheless, the optical qualities of diamonds make them the world’s most prized gemstone. Diamonds have been adored as precious objects in the cultures of India for over 3000 years. This owes, perhaps, to their innate ability to refract light more than any other natural substance on Earth, bending and creating unique effects with it.   
  
Similar to other precious stones, the price and value of diamonds is determined by carat (size and weight), cut, color, and clarity, in addition to geographic origin. Today, both naturally occurring and synthetic diamonds are available to consumers. A trace element of boron creates the slightly bluish hue of a diamond, although natural diamonds may contain other elemental impurities that alter the color from black, brown, red, and orange to green, blue, and yellow.  
  
Eli Mirzoeff is a Manhattan-based gemstone expert, a GIA-certified gemologist, and a third-generation jeweler in New York City. The owner of East Continental Gems, a leading provider of fine jewelry to specialty jewelry stores, luxury fashion boutiques, and department stores, Eli Mirzoeff is a diamond jewelry expert, ensuring that clients receive the finest quality diamonds for the price.