**38 Topaz**

Topaz is a hard, transparent mineral. It is a compound of aluminum, silica, and fluorine. Gem topaz is valuable. Jewelers call this variety of the stone "precious topaz". The best-known precious topaz gems range in color from rich yellow to light brown or pinkish red. Topaz is one of the hardest gem minerals. In the mineral table of hardness, it has a rating of 8, which means that a knife cannot cut it, and that topaz will scratch quartz.

The golden variety of precious topaz is quite uncommon. Most of the world's topaz is white or blue. The white and blue crystals of topaz are large, often weighing thousands of carats. For this reason, the value of topaz does not depend so much on its size as it does with diamonds and many other precious stones, where the value increases about four times with each doubling of weight. The value of a topaz is largely determined by its quality. But color is also important: blue topaz, for instance, is often irradiated to deepen and improve its color.

Blue topaz is often sold as aquamarine and a variety of brown quartz is widely sold as topaz. The quartz is much less brilliant and more plentiful than true topaz. Most of it is a variety of amethyst: that heat has turned brown.