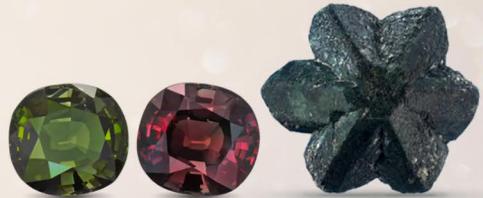


ALEXANDRITE

Green in sunlight. Red in lamplight.
Color-changing alexandrite is nature's magic trick.



ABOUT ALEXANDRITE



Often described by gem aficionados as "emerald by day, ruby by night," alexandrite is the very rare color-change variety of the mineral chrysoberyl.

Originally discovered in Russia's Ural Mountains in the 1830s, it's now found in Sri Lanka, East Africa, and Brazil, but fine material is exceptionally rare and valuable.

BIRTHSTONES & ANNIVERSARIES

Alexandrite is a birthstone for June, along with pearl and moonstone. Alexandrite is also the gem for the 55th wedding anniversary.

TREATMENTS

There are a number of processes used to alter the color, apparent clarity, or improve the durability of gems.

SYNTHETICS

Some gemstones have synthetic counterparts that have essentially the same chemical, physical, and optical properties, but are grown by man in a laboratory.

IMITATIONS

Any gem can be imitated—sometimes by manmade materials or by natural materials chosen by man to impersonate a particular gem.

1830

The year alexandrite was discovered in Russia's Ural Mountains.

CZAR ALEXANDER II

Gem's namesake who emancipated Russia's serfs and was assassinated in 1881.

580NM

This absorption band allows alexandrite to shift from red to green when viewed under different light sources.

FACTS

MINERAL: Chrysoberyl

CHEMISTRY: BeAl_2O_4

COLOR: Bluish green in daylight, purplish red in incandescent light

REFRACTIVE INDEX: 1.746 to 1.755

BIREFRINGENCE: 0.008 to 0.010

SPECIFIC GRAVITY: 3.73

MOHS HARDNESS: 8.5



WHY WE LOVE THIS GEMSTONE

COLOR CHANGE

Making alexandrite change color from green to red is the world's most fun use of a penlight.

LIGHT SOURCE

This gem provides dramatic proof of how much the light source affects color in gems.

PHENOMENA

Alexandrite can show both color change and a cat's-eye: two phenomena in one gem.