## **Gemstones**

# **Categories**

- Minerals: Natural, inorganic, solid constituent of Earth's crust.
- Crystals: Uniform body with geometric lattice. The different structures of lattice create marrying crystal properties of minerals and gems.
- Stones: Collective name for all constituents of Earth's crust. Jewelers call stones gems.
- Jewels: Every personal ornamental pieces is a jewel-generally a piece of jewelry containing gems set in precious metal.

Mohs scale of hardness: 10 hardest descending to 1 least hard.

Amber: Organic non mineral, non-crystal

- Color: light yellow to brown, red, nearly colorless, milky white, blue, black, Greenwich.
- Hardness: 2 21/2
- Deposits: largest in Poland she bit of Baltic, Sicily, Romania, Burma, Canada, us some Atlantic states, Dominican Republic.
- Mixture of fossil resins of trees.

Amethyst: Quartz, crystal

- Color: Violet, pale red-violet
- · Hardness: 7
- Deposits: Most important in Brazil, Uruguay, Madagascar, US, Soviet Union, India, Australia, South Africa.

Chrysocolla: Quartz, crystal

· Color: green blue

Hardness: 2-6

 Deposit: Chile, Russia, U.S. (Arizona and Nevada), Zaire. Chrysocolla quartz is inter-grown with chrysocolla, the darker deep green is inter-grown with turquoise and malachite.

Citrine: Quartz, crystal

• Color: Light yellow to golden brown.

• Hardness: 7

• Deposits: Rare, not much in any deposit. Brazil, Madagascar US (Pikes Peak) Spain, Russia, France, Scotland.

Malachite: Ore of copper, crystal

• Color: Light green, emerald green, black-green, usually in alternate stripes (veining).

• Hardness: 3½ - 4

 Deposits: Most important in quality and quantity from the Zaire, Australia, Chili, Rhodesia, South Africa, U.S. Arizona. Formed from copper containing solutions in or near copper ore deposits.

Mother of Pearl: Organic

Inner layer of mollusk shell with iridescent color.

Onyx: Quartz

· Color: black.

Hardness: 6½

 Deposit: Most from Uruguay and bordering areas of Brazil, plus lesser amounts from many other countries.

## **Opal:** Quartz, Crystal

- Color: white, gray, blue green, orange.
- Hardness: 5½ 6½
- Deposits: Czechoslovakia, Australia, Brazil, Guatemala, Honduras, Japan, U.S-. Nevada. Special characteristic: rainbow light iridescent which changes with angle of observation.

### Petrified Wood: Fossil

- · Color: Brown, gray, red.
- Hardness: 6½ 7
- Deposits: Most important and splendidly colored near Holbrook, Arizona. Smaller deposits: Egypt, Argentine, Nevada, all continents.

## Rose Quartz: Crystal

- Color: Strong pink, pale pink, off and crackled somewhat milky.
- Hardness: 7
- Deposits: Largest supplies Brazil, best quality Madagascar. Other: Southeast Africa, Brazil, U.S.

## Turquoise: Mineral, crystal

- Color: Sky-blue, blue-green, apple green.
- Hardness: 5 6
- Deposits: Iran, Afghanistan, Australia, China(Tibet), Tanzania, U.S. (Nevada, Arizona, California, New Mexico). Turquoise can contain a narrow range of other minerals, either isolated or in network format which are usually black or brown.

## Typical gemstones in Southwestern Indian Jewelry

#### Green

- Malachite: Bright green or green banded with black. Sometimes found in association with azurite, a dark blue mineral
- Serpentine: Variety of colors and streaky patterns. A "pea soup green" or "oily luster."

# **Turquoise Blue**

- Turquoise: Colors range from whitish to green, blue-greens and deep sky blue. Has a waxy luster common and is opaque. Dark patterns in surface called matrix results from mixture with surrounding rock. Relatively porous-can change color if it absorbs oils, etc.
- Veriscite: Soft sea greenish-blue. A cousin of turquoise.

## **Deep Blue**

• Lapis Lazuli: Deep blue with other minerals, including pyrite (gold looking). Can have some pale blue shades but luster is very different from turquoise.

## **Purple**

- Charoite-Lavender gemstone. Lacey, crackly appearance.
- Sugilite: Translucent pale lavender to deep, opaque purple gemstone. Royal Lazulite is a trade name -sugilite is the more appropriate term.

## Red/Red-Orange

- Spiny Oyster Shell: A red-orange and white shell found in the Gulf of California. Orange on the outside, white on the inside. Thorny Oyster or Spondylus shell.
- Coral: Ranges in shade from deep red to oranges. (See pink) Most is gathered in the Mediterranean, but also comes from the Japanese Sea and South Pacific.

### **Pink**

- Angel skin coral: Is a very fine variety, pale pink in color. Pink corals are also fished in the Mediterranean.
- Pink Mother-of-Pearl: Iridescent lining of many shells. Mother of pearl with a pinkish cast can come from green snail shell or pink mussel.

## Watery Blue/Pink

Abalone: Can have pink or reddish inner layer resembling coral or spiny oyster.
Nacreous interior like "oil on water," - pink, yellow, blue, silvery highlights.

#### **Iridescent**

 Opal: Precious opal displays rainbow iridescence. Common opal has wide range of color, but no iridescence. Main body color of precious opal ranges from pale to black. Fire opals (yellow to orange and red), from Mexico.

### White

- Fossil (Mastodon) Ivory: Excavated remains of prehistoric animals-not from protected species. Creamy-white to golden white color. Sometimes slightly mottled.
- Dolomite: Vitreous to pearly luster. Bright white color is used in Native American jewelry.
- White Mother-of-Pearl: Iridescent lining of many fresh and saltwater shells. It is difficult to name a specific source of white pearly substances. Some shell is also a light golden color.

### **Black**

- Jet: Also called lignite, a derivative of coal. Has a lightweight feel. Black, or dark brown. Sometimes a little streaking.
- Onyx: Produced by chemically treating agate. Typically sold to jewelers as cabochons, cut stones with a dome like upper surface.