

# Known Mineral Properties

| Mineral Name           | Observations   | Light Interaction              | Streak             | Hardness | Cleavage        | Smell       | Ice                   | Solubility                          | Remarks  |
|------------------------|--|--------------------------------|--------------------|----------|-----------------|-------------|-----------------------|-------------------------------------|--|
| Quartz (Rose)          | Pinkish to colorless; Shiny; No flat surfaces            | Opaque to translucent          | Colorless          | 7        | None            | None        | Average               | Insoluble in water and acid         | Sand on most beaches is made of quartz; Variations are used in jewelry     |
| Feldspar (Microcline)  | Pinkish white; Some very flat surfaces; Slightly shiny   | Opaque                         | Colorless          | 6        | Good to perfect | None        | Slow to average       | Insoluble in water; soluble in acid | Major component is granite, which is used in building construction         |
| Calcite (Iceland spar) | Clear, colorless crystal; Shaped like a squashed box     | Transparent; Double Refractive | Colorless to white | 3        | Perfect         | None        | Average to fast       | Insoluble in water; soluble in acid | Perfect cleavage; Cleavage not at 90 degrees; Primary mineral in limestone |
| Mica (muscovite)       | Colorless to metallic brown; Thin and very flat; Layered | Transparent to translucent     | Colorless          | 2-2.5    | Perfect         | None        | Slowest of group      | Insoluble in water; soluble in acid | Thin, flat, sheet-like flexible pieces peel off easily                     |
| Halite                 | Clear, colorless crystal; Shaped like a perfect box      | Transparent to translucent     | Colorless to white | 2-2.5    | Perfect         | None        | Very fast             | Soluble in water and acid           | Commonly known as salt; Perfect 90-degree cleavage                         |
| Hematite               | Dark red-brown to silver; Dull, not shiny                | Opaque                         | Red to silver      | 3-6      | None            | None        | Average               | Insoluble in water; soluble in acid | Can look earthy or metallic; Metallic version used in jewelry              |
| Sulfur                 | Bright yellow; Dull, not shiny                           | Opaque                         | White to yellow    | 1.5-2.5  | None            | Rotten eggs | Average               | Insoluble in water; soluble in acid | Used to make explosives, fertilizer and sulfuric acid                      |
| Pyrite                 | Brass yellow to metallic gold                            | Opaque                         | Green to black     | 6-6.5    | None            | None        | Above average to fast | Insoluble in water; soluble in acid | Known as fool's gold   |