

Mineral Spotlight: Gold

This 6.8 ounce gold nugget was obtained from the Victoria Goldfields of Australia. Gold is one of few native elements (Au) to occur in nature. It has an isometric crystal system and occurs in grains, sheets, flakes, dendrites, and nuggets. Yellow is usually the common color of gold unless there are impurities.

Gold and fool's gold (pyrite) can sometimes occur together. One of the techniques used to differentiate them involves measuring their specific gravity. Gold has a specific gravity of 19.32 while pyrite has one of about 4.5. Gold is inert, meaning it doesn't bond nor react with most chemicals.

Gold has been in use for the last 6000 years stretching back to the ancient civilizations of Egypt and Mesopotamia. Gold occurs in high temperature hydrothermal quartz veins in extrusive rocks. It is also obtained in sedimentary environments (placers) and alluvial deposits (river sand). It is not uncommon to find gold in fossil deposits (conglomerate matrix). The most common use of gold is jewelry making. Gold coating is used in satellite components for temperature control purposes.

This feature was posted on Dice Museum social media by Museum docent Gregory Ian Oduor on 8/2/2021. It has since been edited to fit a web-based format.

