The mineral **pyrite**, or **iron pyrite**, is an iron sulfide with the formula FeS_2. This mineral's metallic luster and pale-to-normal, brass-yellow hue have earned it the nickname **fool's gold** because of its resemblance to gold. The color has also led to the nicknames **brass**, **brazzle** and **Brazil**, primarily used to refer to pyrite found in coal.[5][6]

Pyrite is the most common of the sulfide minerals. The name pyrite is derived from the Greek ***πυρίτης*** (puritēs), "of fire" or "in fire", from *πύρ* (pur), "fire". In ancient Roman times, this name was applied to several types of stone that would create sparks when struck against steel; Pliny the Elder described one of them as being brassy, almost certainly a reference to what we now call pyrite.[7] By Georgius Agricola's time, the term had become a generic term for all of the sulfide minerals.[8]

Pyrite is usually found associated with other sulfides or oxides in quartz veins, sedimentary rock, and metamorphic rock, as well as in coal beds, and as a replacement mineral in fossils. Despite being nicknamed fool's gold, pyrite is sometimes found in association with small quantities of gold. Gold and arsenic occur as a coupled substitution in the pyrite structure. In the Carlin, Nevada gold deposit, arsenian pyrite contains up to 0.37 wt% gold.[9]