

# PYRITE



## Iron Sulphide

Pyrite, which is the most abundant of the sulphide minerals is commonly found in nearly all types of rock. It is found in igneous rocks as an accessory mineral. In sedimentary rocks, particularly in black shales as a secondary mineral, and in metamorphic rocks, especially in black slates as well defined cubes. Large masses of pyrite are found in contact metamorphism, and pyrite is sometimes associated with coal measures. It is quite a common mineral in low temperature hydrothermal sulphide deposits, where it is associated with chalcopyrite, galena, sphalerite, calcite, etc. Fossils, most of which are found in the sedimentary rocks may sometimes be replaced by pyrite in a process known as pyritisation..

Pyrite crystallises in the cubic system. usually as cubes, but it also occurs in octahedral or pyritahedron form. It may also take the form of granular aggregates, concretions, or radiating masses. The cubes are often striated on adjacent faces at  $90^\circ$  to each other due to the oscillation between this form and the pyritahedron form. The usual colour of pyrite is fairly dark yellow, sometimes with an iridescent sheen. The name pyrite is derived from a Greek word meaning fire, because sparks can be produced by striking the pyrite sharply, a property which was exploited long ago in flintlock firearms. Pyrite is put to a better use by breaking it down into its constituent parts and making use of the sulphur in the production of sulphuric acid

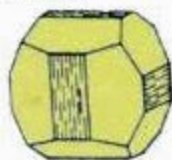
### THE COMMON CRYSTAL HABITS OF PYRITE



STRIATED CUBE



PYRITAHEDRON



OCTAHEDRON